TRADE CATALOG of Thompson Products

(ISSUED JUNE 1, 1938)

VALVES • VALVE GUIDES • VALVE SEAT INSERTS • VALVE SPRINGS • VALVE RETAINERS
PISTONS • PISTON PINS • PISTON PIN BUSHINGS • • CYLINDER SLEEVES
PACKLESS WATER PUMPS • FACTORY TYPE PUMPS • PUMP PARTS • •
TIE RODS • KING PINS • SPRING BOLTS • TIE ROD BOLTS • BUSHINGS
SILENT "U" SPRING SHACKLES • TRYON SHACKLES • HARRIS SHACKLE BUSHINGS

Thompson Products, Inc.

CLEVELAND, OHIO, U. S. A.

COPYRIGHTED 1938, BY THOMPSON PRODUCTS, INC. • PRINTED IN U. S. A.

In this catalog

47 Pages of

"MACHINE SHOP TIPS"

to—

SPEED UP Your Repair Operations
IMPROVE the QUALITY of Your Work
PREVENT "COME-BACKS"
INCREASE Your PROFITS
ASSURE Complete SATISFACTION
from the Thompson Parts You Install

●

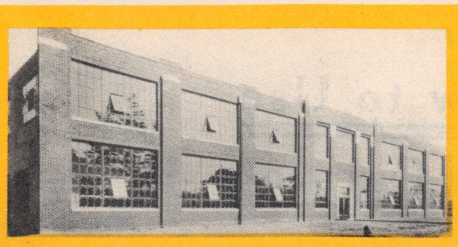
(See pages 17 to 64)

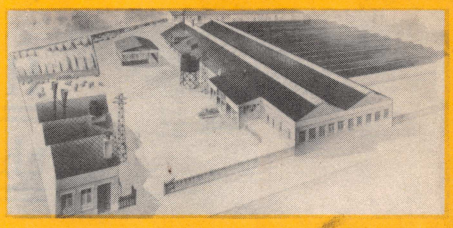
"No part is RIGHT unless it is correctly finished and installed!

Complete TABLE of CONTENTS and
HOW TO USE THIS CATALOG
will be found on Pages 2 and 3.

CTP 500

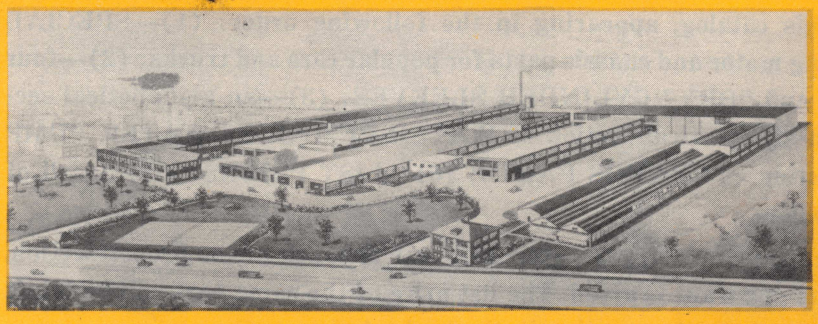
Canadian Plant
St. Catharines, Ont.

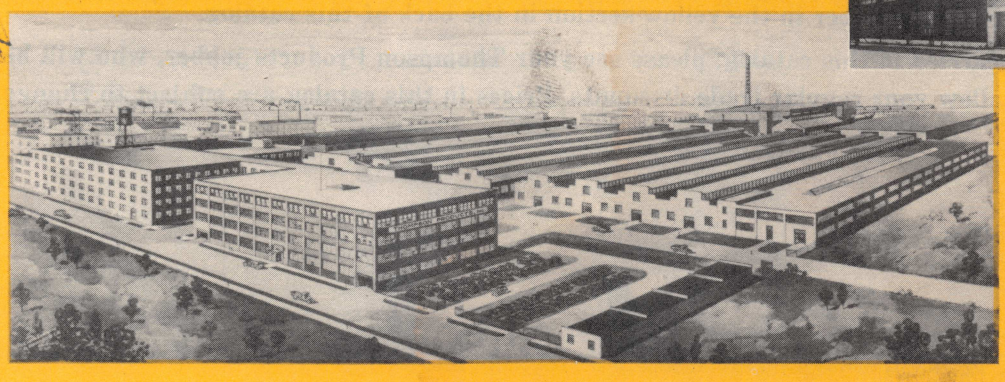




Michigan Plant
Detroit, Mich.

European Affiliate, Paris, France





Service Division Shipping Plant & Warehouse Cleveland, O.

Main Plant and General Offices, Thompson Products, Inc., Cleveland, O.

Thompson Products, Inc.

Directly-owned Plants in—

CLEVELAND, OHIO
DETROIT, MICH.
ST. CATHARINES, ONT.
European Affiliate
PARIS, FRANCE

18 Factory Branches located in—

ATLANTA, GA.
BOSTON, MASS.
CHICAGO, ILL.
DALLAS, TEXAS
DETROIT, MICH.
INDIANAPOLIS, IND.
KANSAS CITY, MO.
LOS ANGELES, CAL.
MEMPHIS, TENN.
MINNEAPOLIS, MINN.
NEW YORK, N. Y.
PHILADELPHIA, PA.
PITTSBURGH, PA.
PORTLAND, ORE.
ST. LOUIS, MO.
SAN FRANCISCO, CAL.
SEATTLE, WASH.
TORONTO, ONT.

Export Offices—Cleveland, Ohio, U. S. A. Cable Address—"Thompro—Cleveland"

Replacement Products:

VALVES
VALVE GUIDES
VALVE SEATS
VALVE SPRINGS

VALVE RETAINERS
PACKLESS PUMPS
FACTORY TYPE PUMPS
PUMP PARTS

PISTONS
PISTON PINS & BUSHINGS
CYLINDER SLEEVES
TIE RODS

DRAG LINKS
TRYON SHACKLES
SILENT "U" SHACKLES
HARRIS SHACKLE BUSH.

KING PINS
SPRING BOLTS
TIE ROD BOLTS
OILITE BUSHINGS

Founded and incorporated in Cleveland, Ohio, January 2, 1901. Detroit Plant (Tie Rods, Drag Links, Starting Cranks and Brake Rod Assemblies) acquired in June, 1916. Replacement Division established October, 1924. European Affiliate, Paris, France, acquired in October, 1929. Canadian Plant, St. Catharines, Ontario, erected in 1930. Service Division Shipping and Warehousing plant acquired in 1935.

How to Use this Catalog

THERE are six sections in this catalog, appearing in the following order: (1)—SPECIAL ASSORTMENTS of fast-selling motor and chassis parts for popular cars and trucks; (2)—four pages covering both "WET" and "DRY" CYLINDER SLEEVES; (3)—an alphabetical section of MOTOR PARTS; (4)—an alphabetical section of WATER PUMPS and WATER PUMP PARTS; (5)—an alphabetical section of CHASSIS PARTS; (6)—LIST PRICES covering all of the above, on special YELLOW pages.

To locate a part, first find the name, model, year, etc. of the car or truck in the proper section, where the stock number of the part you want is given. The list price of the same part will be found opposite the similar stock number in the yellow section in the back of this catalog.

For parts not carried in this catalog, please see your Thompson Products jobber, who will be glad, of course, to allow your regular trade discounts. Prices in this catalog are subject to change without notice.

Page Index

	Page:
ASSORTMENTS of Fast-selling Parts for Popular Cars and Trucks	65 to 76
CHASSIS PARTS Alphabetical List—Bolts, Bushings, Tie Rods and Spring Shackles (Follows Water Pump Section)	Aj to Ze
CYLINDER SLEEVES, "Wet" and "Dry"	77 to 80
EXPLANATION OF SYMBOLS and Key to Stock Numbers	3
"KNOW YOUR MERCHANDISE"—Selling Points on Thompson Products	6 to 15
LIST PRICES—Last Section of this Catalog	(Yellow Pages)
MACHINE SHOP TIPS	17 to 64
MOTOR PARTS Alphabetical List—Valves, Valve Guides, Valve Seat Inserts, Springs and Retainers, Pistons, Piston Pins, Pin Bushings (Follows Assortment Pages)	Ac to Ye

Page Index (Cont'd)

	Page:
ORIGINAL EQUIPMENT LIST of Thompson Products	4 and 5
THOMPSON TROPHY RACE	16
VALVE GUIDE TOOL	81
WATER PUMPS and Water Pump Parts (Follows Motor Parts Section)	A1 to Ye
WRIGHT "CYCLONE" AIRCRAFT ENGINE VALVE	(Inside Back Cover)

Explanation of Symbols and Key to Stock Numbers

VALVES:

* —$\frac{1}{64}$" oversize stem also carried

S —EXHAUST Valve

V —INTAKE Valve. Similar "S" and "V" numbers are interchangeable dimensionally.

AS —Heavy-duty AEROTYPE Exhaust Valve of aircraft valve steel (austenitic Silcrome-X alloy)

卐 —Heavy-duty AEROTYPE Exhaust Valve with STELLITE seat.

AEX —Complete EXHAUST VALVE SET, including valves, guides, springs, retainers

AIN —Complete INTAKE VALVE SET, including valves, guides, springs, retainers

PISTONS:

B —"B" after "type" or "material" indicates bushed piston.

BUSHINGS:

S —"S" after stock number indicates steel bushings.

SB —"SB" after stock number indicates split bronze bushings.

KING BOLTS:

A —"A" after stock number indicates complete king bolt assembly; 2 king pins, bushings, bearings, plugs, lock pins, lock pin nuts, washers, etc.

GENERAL:

☞ —Comment preceding "fist" applies to part listed in next column

♂ —Comment following arrow-and-circle applies to part pointed to on line above.

Thompson Products in Original Equipment

"Every part made by Thompson Products, Inc. has been approved by automobile manufacturers, and every well known automobile on the road today, old or new, carries one or more parts of the Thompson Products replacement line as original equipment."

Note: Because this chart is intended to demonstrate the vast replacement market for Thompson Products due to their wide equipment usage, and the replacement demand is naturally greatest for older vehicles, the data here given extends from 1935 to June 1, 1938.

PASSENGER CARS	VALVES	VALVE RETAINERS	VALVE SEATS	PISTON PINS	SPRING SHACKLES	HARRIS BUSHINGS	TIE RODS	BUSHINGS	MISCELLANEOUS
AUSTIN				●					●
BUICK	●					●	●		●
CADILLAC	●	●			●		●		●
CHEVROLET		●							●
CHRYSLER	●	●	●	●	●	●	●	●	●
DE SOTO	●	●	●		●	●	●	●	●
DODGE	●	●	●		●	●		●	
FORD							●	●	●
GRAHAM	●			●			●	●	●
HUDSON					●		●	●	●
HUPMOBILE					●		●		●
LAFAYETTE		●			●		●		●
LA SALLE	●	●			●		●		●
LINCOLN							●		●
LINCOLN ZEPHYR						●	●		●
NASH		●			●		●	●	●
OLDSMOBILE	●	●			●		●		
PACKARD						●	●	●	
PIERCE-ARROW							●		
PLYMOUTH	●	●	●		●	●		●	
PONTIAC	●	●				●	●		●
STUDEBAKER					●				●
TERRAPLANE					●	●	●	●	●
WILLYS					●	●		●	

TRUCKS and BUSSES	VALVES	VALVE RETAINERS	VALVE SEATS	PISTON PINS	SPRING SHACKLES	HARRIS BUSHINGS	TIE RODS	BUSHINGS	MISCELLANEOUS
AUTOCAR	●	●	●				●	●	●
AVAILABLE	●						●		
BIEDERMAN	●								
BROCKWAY	●						●		
CHEVROLET		●							●
CLYDESDALE	●						●		
COLEMAN	●						●		
CONDOR	●								
CORBITT	●						●		
DAY-ELDERS	●								
DIAMOND-T	●						●	●	●
DODGE	●	●	●	●	●	●		●	●
DUPLEX	●						●		●
ESCO									

TRUCKS and Busses (Cont'd)	VALVES	VALVE RETAINERS	VALVE SEATS	PISTON PINS	SPRING SHACKLES	HARRIS BUSHINGS	TIE RODS	BUSHINGS	MISCELLANEOUS
FAGEOL	●	●					●		●
FARGO	●	●	●					●	●
FEDERAL	●								●
FORD							●		●
F-W-D	●						●		●
GMC	●	●					●	●	●
GRAMM	●					●	●		●
GRASS-PREMIER									
HAHN	●						●		
HENDRICKSON							●		
HUDSON					●	●	●	●	●
HUG									
INDIANA	●	●					●		●
INTERNATIONAL	●	●						●	●
KENWORTH	●						●		●
LA FRANCE-REP.							●	●	●
LE BLOND-SCHACHT	●								
LE MOON	●						●		●
MACK		●				●	●	●	●
MASTER	●								
MORELAND	●						●		
NETCO									
NOBEL							●		
OSHKOSH	●						●		●
PLYMOUTH	●	●	●		●	●		●	
SCHACHT	●					●	●		
STERLING	●		●				●		●
STEWART	●						●		●
STUDEBAKER	●				●				
WARD-LA FRANCE	●						●		●
WALTER							●		●
WHITE		●				●	●		●
WILLYS						●		●	

TRACTORS and COMBINES	VALVES	VALVE RETAINERS	VALVE SEATS	PISTON PINS	SPRING SHACKLES	HARRIS BUSHINGS	TIE RODS	BUSHINGS	MISCELLANEOUS
ADVANCE-RUMELY							●		●
ALLIS-CHALMERS	●	●	●	●			●	●	●
CATERPILLAR	●						●		●
CLETRAC	●						●		●
CO-OP							●		●
JOHN DEERE		●					●	●	●

ORIGINAL EQUIPMENT LIST—(Cont'd)

TRACTORS and COMBINES (Cont'd)

	VALVES	VALVE RETAINERS	VALVE SEATS	PISTON PINS	SPRING SHACKLES	HARRIS BUSHINGS	TIE RODS	BUSHINGS	MISCELLANEOUS
FARMALL	●	●						●	●
FORDSON									
GLEANER-BALD.									
HOLT							●		●
HUBER	●								●
INTERNATIONAL HARVESTER	●	●							●
McCORMICK-DEERING	●	●						●	●
MASSEY-HARRIS		●					●	●	●
MINNEAPOLIS-MOLINE		●						●	●
OLIVER HART-PARR							●	●	●
ROCK ISLAND								●	

ENGINES (Automotive, Industrial and Marine)

BRIGGS & STRATTON	●								
BUDA								●	
CHICAGO PNEUMATIC	●		●					●	
COOPER-BESSEMER	●		●						
CONTINENTAL	●								
CUMMINS									
ELECTRIC BOAT	●							●	
FAIRBANKS-MORSE	●	●						●	
FRANKLIN VALVELESS	●	●	●	●					
HILL DIESEL	●			●					
HERCULES		●						●	
INGERSOLL-RAND	●		●					●	
INTERNATIONAL HARVESTER	●	●						●	●
KERMATH	●								
KOHLER									
LE ROI	●	●						●	
LYCOMING	●	●	●	●					●
NATIONAL SUPERIOR	●		●					●	●
NATIONAL TRANSIT	●	●	●	●					
NIAGARA									
PEERLESS MARINE	●								
SANDERSON CYCLONE	●								
SCRIPPS MARINE									
STEARNS									
STERLING MARINE	●		●	●					
U.S. ARMY	●		●	●				●	
U.S. NAVY	●		●	●					
WAUKESHA	●	●	●					●	●
WESTINGHOUSE	●							●	●
WOLVERINE	●								
WORTHINGTON	●		●					●	
WINTON									

AVIATION ENGINES

ACE	●								
AERONAUTICAL PRODUCTS	●	●							
AXELSON									
CONTINENTAL	●			●					●
JACOBS	●								●
LAMBERT	●								
LE BLOND									

AVIATION ENGINES (Cont'd)

	VALVES	VALVE RETAINERS	VALVE SEATS	PISTON PINS	SPRING SHACKLES	HARRIS BUSHINGS	TIE RODS	BUSHINGS	MISCELLANEOUS
LYCOMING	●	●	●	●					●
MENASCO	●								
PRATT & WHITNEY	●	●	●					●	●
SZEKELY	●								
WARNER								●	
WRIGHT	●		●					●	●

MOTOR-CYCLES

HARLEY-DAVIDSON								●	
INDIAN	●								

Checked and Double-Checked!

"When you install Thompson Products parts you are sure of specifications that have been checked and approved both by Thompson and the car builders' engineering departments. Doesn't that make them a pretty safe bet for the jobs you turn out?"

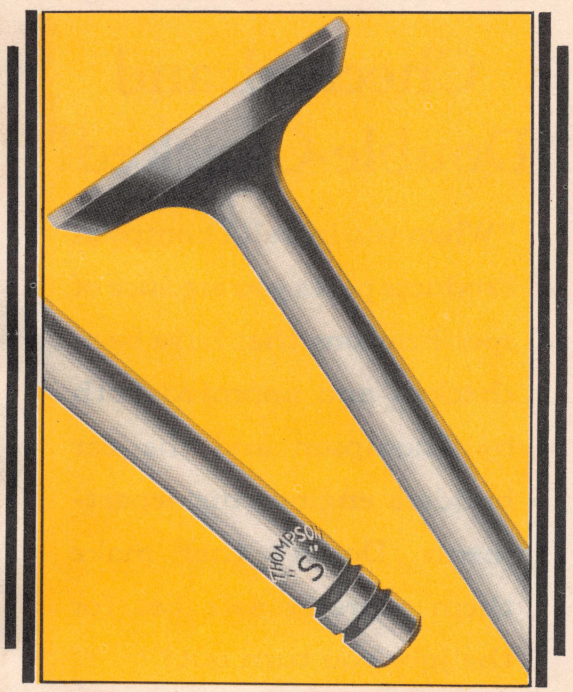
"Know Your Merchandise!"

. . . and you'll have the key to MORE SALES and MORE PROFIT!

Thompson "S" (Exhaust) Valves
(Silcrome-X Steels)

The famous Silcrome valve steel that Thompson Products introduced seventeen years ago has been replaced by a wide range of silicon-chromium alloys known as the "Silcrome-X" series. This came about because higher engine speeds, increased compressions and more powerful fuels brought new valve problems. No longer did a single exhaust valve steel meet all purposes.

The many Silcrome-X valve steels now used by Thompson Products include "austenetic" and "non-magnetic" types. The Silcrome-X series is finely graduated to fit the individual operating characteristics of every engine model. Today these characteristics vary widely. A valve that is perfect for one engine often falls short in another. Thompson Products was first to adopt the Silcrome-X steels, just as they were first with the original "Silcrome" in 1921.



Millions of Silcrome-X valves are made each year by Thompson Products for car, truck, tractor and bus builders. The repairman who puts in a set of Thompson "S" valves is sure of getting the Silcrome-X steel that does the best possible job.

Thompson "S" valves are the most widely known exhaust valves in the world.

They have unequalled heat and wear resistance.

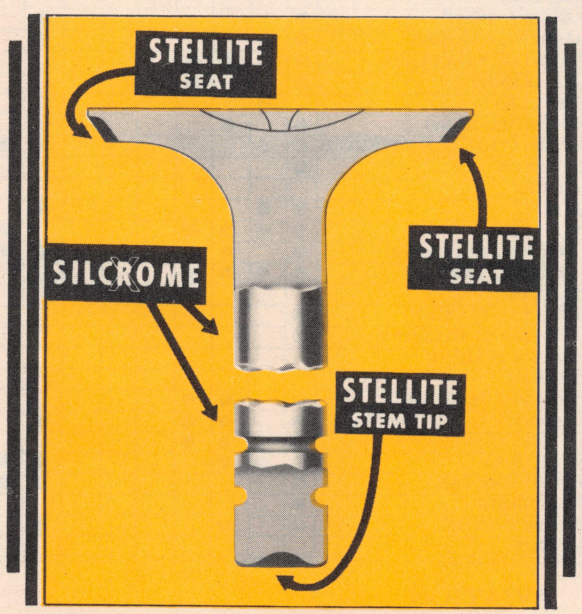
They conform to the block seat, giving best sealing efficiency.

They grind in quickly.

They are the leaders in aviation. The Thompson "S" valves you buy are made by the same men and machines that make Thompson aircraft valves.

Thompson "AS" Aerotype Valves for Heavy Duty
(Stellited Seat and Tip)

The Thompson "AS" valve is a super-valve for heavy duty service in trucks, tractors, buses and passenger cars. It was the pioneer automobile valve with Stellite on the seat and stem tip, introduced to the industry by Thompson Products in 1934. For several years prior to that time, Thompson Products had been making valves of this type for aircraft engine builders—armored at the two points of wear and impact with Stellite, one of the hardest known alloys. The valve itself is of the same "austenetic" Silcrome-X steel used for aircraft engines. It is far more rugged



SEE Pages 65 to 76 for ASSORTMENTS of FAST-SELLING PARTS for POPULAR CARS AND TRUCKS

than anything developed heretofore for automotive use, for the Stellite resists battering and wear at the two critical points and the Silcrome-X steel has exceptional strength and resistance to burning. Fleet operators everywhere are using this "AS" valve to reduce maintenance costs. 100,000 miles of efficient service is common experience. Thompson "AS" Aerotype valves cost more, but they are worth it. We recommend them for all buses, trucks and tractors and wherever breakage, warping, rapid wear, burning or battering troubles are encountered.

Thompson "V" (Intake) Valves
(Nickel-chromium Steel)

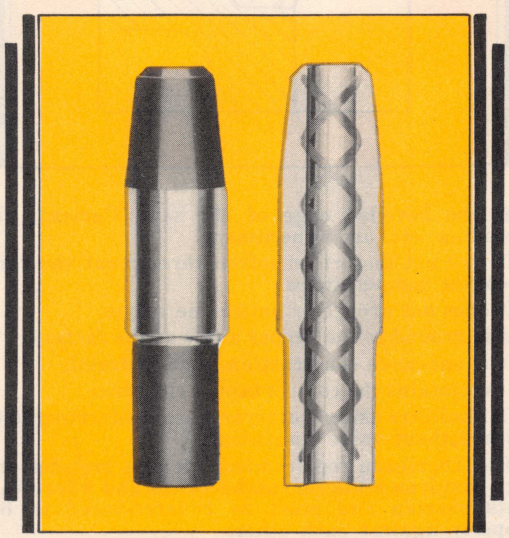
Thompson "V" valves, for the intake side, were widely used as exhaust valves before the introduction of the Thompson Silcrome valve. They are forged from a nickel-chromium steel which has great strength, wear resistance and sealing efficiency.

Complete Thompson Valve Sets

The valve columns in the Motor Parts Section of this catalog list complete valve sets for many popular cars and trucks. These sets are packed in a single box. They include the exhaust or intake valves, valve springs, guides and retainer locks for completely renewing the old valve assembly. Exhaust valve sets are designated by "AEX" following the valve stock number—intake valve sets by "AIN." When valves need replacing the chances are ten-to-one that the other parts should be renewed, too. Ordering by the set saves time and prevents errors. It also pays you a bigger profit and guarantees perfect performance of the new valves.

Thompson Graphited (Self-lubricating) Valve Guides

Thompson valve guides offer more value for the same money because they are inlaid with graphite, the finest natural lubricant that is known. This graphite



is good insurance against valve sticking and helps the valves to open and close correctly. Other features of this product are:

No reaming necessary. The holes are accurately sized at the factory to take the standard size valve stem.

The holes are BURNISHED, to further insure perfect valve action.

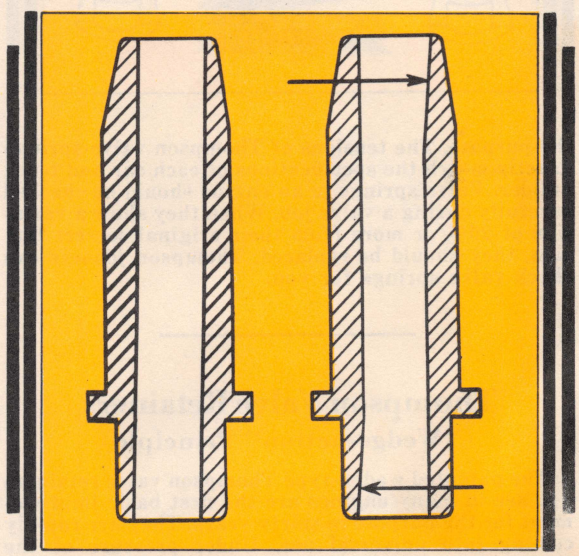
Made of a chrome-nickel iron alloy—90 to 95 Rockwell hardness, as compared with 70 to 80 hardness of ordinary soft-iron guides.

They are core-cast, which puts the best part of the metal in the bearing surface, where it should be.

Manufacture is extremely accurate—Outside diameters are held to .001 and the holes are concentric within .002 with the fit diameter.

Worn Valve Guides Should be Replaced

Because valve guides wear "bell-mouth" at the top and bottom as shown by the arrows on the sketch below (right), trying to ream them for over-size valve stems often results in the condition shown at the left. This makes it impossible for the valve to seat



properly. The valve head is cocked because of a misaligned stem. Loss of power and valve burning follows naturally. For these reasons we recommend that worn guides be replaced instead of reamed. "When you install new valves, put in new guides" is good advice—and there is an extra profit from the sale of the new guides, too.

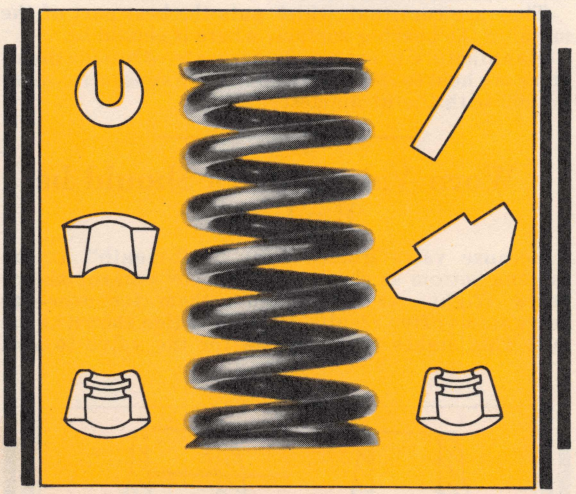
It is EASY to Remove and to Install Valve Guides

The Thompson valve guide tool takes the "grief" out of valve guide renewal, speeds up the job, prevents damage to the guides or engine block, and costs very little. See page 30 for a picture of this handy little tool and a description of how it works.

SEE Pages 65 to 76 for ASSORTMENTS of FAST-SELLING PARTS for POPULAR CARS AND TRUCKS

Thompson Valve Springs
(Swedish Steel)

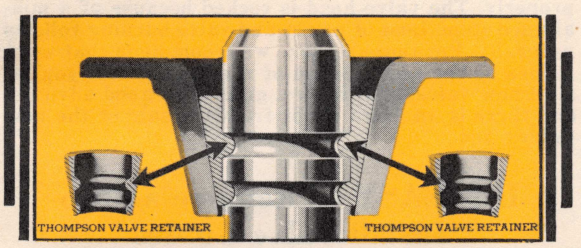
Correct valve spring tensions vary greatly for different cars and trucks and have an important bearing on engine performance. Thompson valve springs keep their original tension for the maximum time because they are made of Swedish steel wire—the finest for



the purpose. The tensions of Thompson valve springs exactly match the specifications of each car and truck builder. Valve springs in an engine should be checked carefully during a valve job. When they show a variation of 20% or more from their original correct tension, they should be replaced. Thompson jobbers can check valve springs for you.

Thompson Valve Retainers
("Wedge-action" Principle)

The patented wedge-type Thompson valve retainers you see in many engines are the first basic improvement for the purpose in thirty years. They are rapidly coming into universal use. Under pressure of the valve spring the two "wedges" keep their original



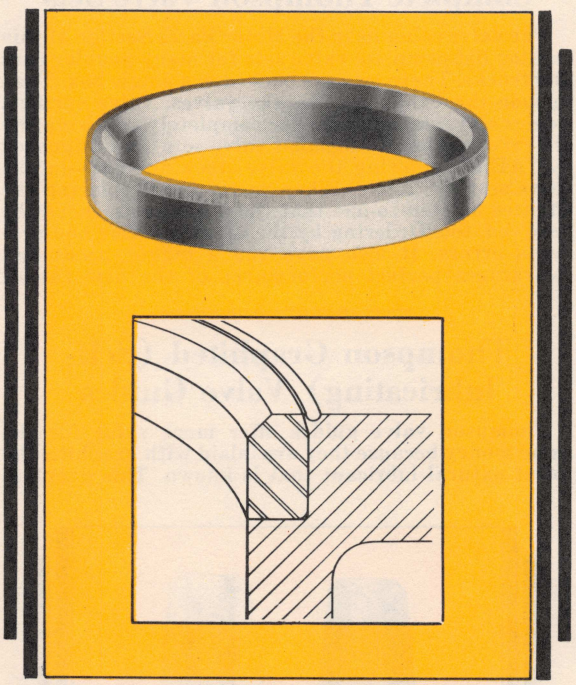
close fit against the valve stem. Spring pressure is distributed equally around the valve stem. The valve stem grooves have no sharp corners to start fatigue cracks. These features prevent battering of the valve stem neck, breakage at the neck, and the erratic valve action that results when other retainers wear loose. This retainer is used in many aircraft engines. The Thompson replacement line also includes all other types of valve retainers for complete valve service.

Thompson Valve Seats
(Duracrome or Cast Iron)

Thompson Duracrome valve seats are in millions of cars and trucks as standard equipment. Made of an extremely hard, patented alloy, they eliminate block pounding, block distortion and valve pick-up and increase valve sealing efficiency. Duracrome seats are now available for many engines that were not equipped with them at the factory.

The Thompson Duracrome seat is highly heat-resisting.

Because it has the same expansion rate as cast iron, it is simply pressed into the block, which is peened



over the bevelled edge of the seat. Cement, pins, threading, etc. are unnecessary.

It will not distort or soften throughout the range of engine temperatures.

It does not groove or batter the valves.

It is ground to the proper angle at the factory.

It is one-piece construction—one material.

It maintains the correct tappet clearance.

Car builders using Duracrome seats advertise 30,000 miles without valve regrinding.

The Thompson replacement line also includes ordinary cast iron seats for intake valves and where valve seats overlap and must be counter-bored to butt properly against each other.

SEE Pages 65 to 76 for ASSORTMENTS of FAST-SELLING PARTS for POPULAR CARS AND TRUCKS

Thompson Pistons

(A Complete Line of Factory-Type Pistons —Alloy and Cast Iron)

The Thompson line of replacement pistons includes every type of piston used as original equipment in cars, trucks, buses and tractors. Among these are:

Tin-plated Pistons
Alcoted (anodic oxidized)
T-Slot Pistons
Cam-ground
U-Slot
Strut type
Trunk type
Chexpan (low expansion)
Cam-ground
"Robotype"
Skeleton type cast iron

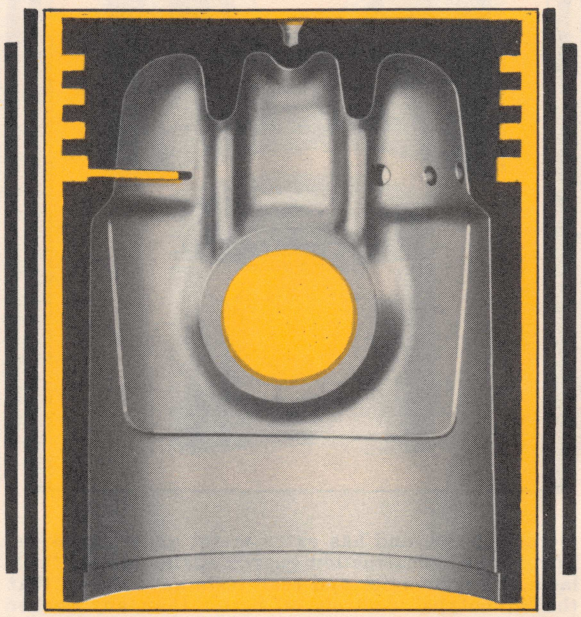
The repairman who uses Thompson factory-type pistons can be sure of an installation that retains the important "balance" of the crankshaft and piston assembly as it came in the new car.

Pin Holes Diamond-Bored

All alloy and bronze-bushed pistons in the Thompson replacement line are now diamond-bored—an important feature. A reamed piston pin hole has many high spots that wear down rapidly following installation. Diamond-boring eliminates these "hills and valleys" and gives a super-smooth finish with a "one hundred percent bearing surface." On page 58 of this catalog is an illustrated article showing how Thompson pistons are diamond-bored.

Thompson Aerotype Pistons for Heavy Duty

For heavy-duty service in trucks, buses and tractors, Thompson Products supplements factory-type pistons with a line of "Aerotype" pistons. This piston is a "brute for punishment"—tougher than any other piston made. Many big fleet operators use nothing but the Thompson Aerotype piston. The strength and long life of this product are due to a special aluminum alloy and heat-treatment, combined with the design features shown in the cross-sectional view. Note the extra-heavy double ribs that support the head. The



thickness of the skirt is double that of ordinary pistons. The pin bosses have more metal, too, and are surrounded by an added thickness inside the skirt. Like all Thompson alloy pistons, the pin holes are diamond-bored, eliminating the rapid initial wear of high spots or ridges in reamed holes. This piston is designated "Aerotype" opposite each listing in this catalog. It is priced higher than other types, and is worth the extra money. Truck and bus operators are proving this every day.

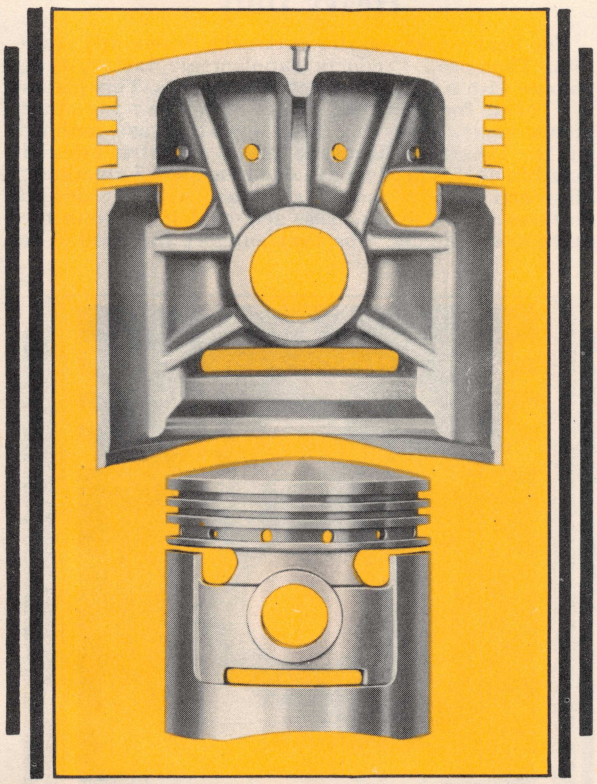
Cam-ground "Robotype" Piston for V-8 Ford Cars

A recent addition to the Thompson piston line is the cam-ground "Robotype" for Ford V-8 engines—so called because the design of the round web forms the face of a robot, or "mechanical man." It is identical

SEE Pages 65 to 76 for ASSORTMENTS of FAST-SELLING PARTS for POPULAR CARS AND TRUCKS

Cam-ground "Robotype" Piston for V-8 Ford Cars (Cont'd)

in design and material to a piston approved and released for service by the car factory. This piston is made of an exceptionally strong aluminum alloy. It is firmly trussed by seven ribs, as the cross-sectional

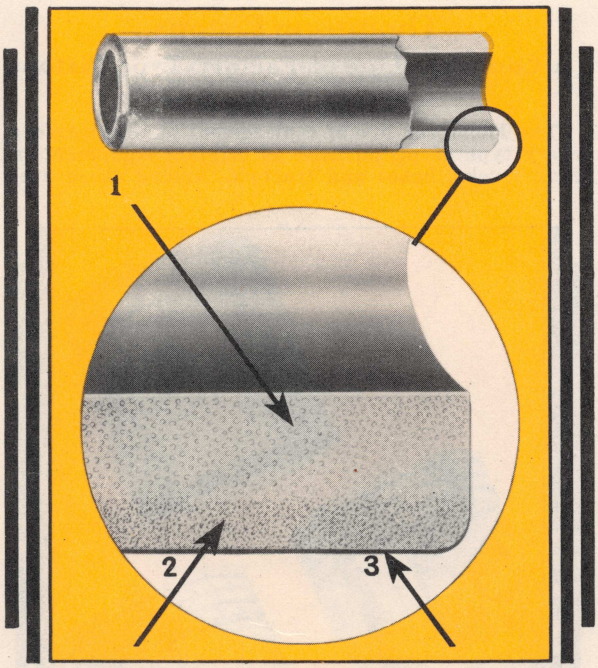


picture shows, and has extra metal under the webs. This rugged construction guards against piston "collapse. Dynamometer and road tests have shown that the "Robotype" controls oil better than any earlier design. Pistons of this new design are designated "Robotype" in this catalog. Many V-8 owners are good prospects for a set—the price is the same as for earlier designs.

Thompson Chrome-plated Piston Pins

Chromium plating is next to a diamond in hardness and is the patented feature of Thompson piston pins. This super-hard surface increases the wear resistence of Thompson piston pins 100% to 200%. Being "stainless" and non-corrosive it is not blackened or pitted by engine acids which often cause ordinary pins to wear rapidly. The chromium plating is much smoother than the finest ground or lapped finish. This adds to the life of the piston pin bushing, too.

The illustration shows how a Thompson chrome-plated pin appears in magnified cross section. "1" is



a soft, tough core for maximum strength; "2" shows the deep case-hardening, which is carefully lapped to form a solid foundation for the final chromium plating, "3". Every operation of fine piston pin manufacturing is embodied in this part, PLUS the added feature of chromium plating.

The diameters of Thompson chrome-plated pins are held to 1/10,000-inch EXACT. They are supplied in perfectly matched sets for quick installation. There are no high spots on the bearing surface of these pins, so an excessively tight fit for "wearing in" is not needed. Truly a MODERN piston pin—the same as used by Chevrolet, Chrysler, Dodge and other well known car builders. Better service for your customers at NO EXTRA COST.

NITRICASTIRON Cylinder Sleeves

(The "Everlasting Sleeve")

The NITRICASTIRON cylinder sleeve is a sensational European development brought to United States fleet operators by Thompson Products, Inc. The nitrided bearing surface of this sleeve has a Brinell hardness of 700 to 1000. The hardest high-speed tool steel for cutting metal Brinells about 685. Special chrome-nickel cylinder blocks Brinell up to 220. 400,000 miles of heavy duty service without reconditioning is common experience with this super sleeve. It is highly resistant to corrosion. The smooth, oil-absorbing nitrided surface triples ring and piston life in most installations. Accurate records of many installations show that the sleeve itself wears on an average of only .001 to .002 inch in 100,000 miles. No wonder NITRICASTIRON is radically reducing maintenance and operating costs for many nationally known American fleet operators! These sleeves are now available for practically every truck, bus and tractor engine.

SEE Pages 65 to 76 for ASSORTMENTS of FAST-SELLING PARTS for POPULAR CARS AND TRUCKS

The MODERN Thompson PACKLESS Water Pump

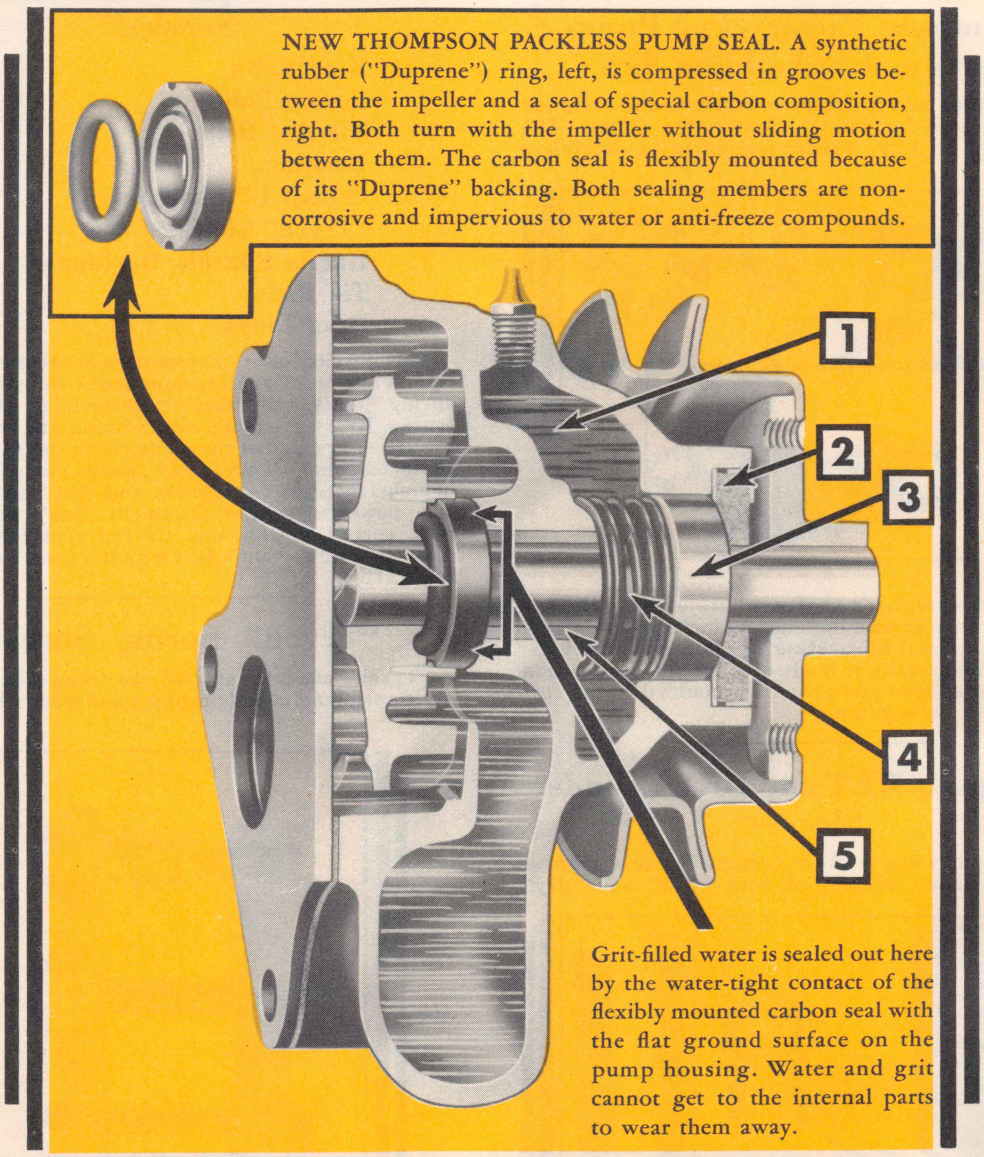
Here is the last word in PACKLESS water pump design for popular cars and trucks—a MODERN pump that does away with "re-packing" and "taking-up," loss of costly anti-freeze compounds, empty radiators and big repair bills.

The heavy arrows point to the new Duprene-carbon sealing assembly, pictured separately in the upper-left-hand corner. The lighter arrows show five features of top quality construction that add to the long, trouble-free performance of this pump: 1—large lubricant chamber, filled with light wheel-bearing grease; 2—steel-encased grease retainer and vibration dampener; 3—high quality deep-groove ball bearings that carry both load and thrust; 4—oil tempered Swedish wire spring that exerts a thrust pressure of 15 pounds, holding the sealing surfaces water-tight; 5—high-speed solid lead-bronze bearing.

Many fleet operators have standardized on the Thompson packless pump—the best possible argument in its favor.

Contrast Thompson packless construction with the ordinary pump pictured on the last page of the pump section of this catalog. Show and explain both pictures to Mr. Car Owner. You'll land many orders for a profitable packless pump installation, and be doing the customer a real service, too.

The pump section of this catalog shows all models for which the Thompson packless design is available.



NEW THOMPSON PACKLESS PUMP SEAL. A synthetic rubber ("Duprene") ring, left, is compressed in grooves between the impeller and a seal of special carbon composition, right. Both turn with the impeller without sliding motion between them. The carbon seal is flexibly mounted because of its "Duprene" backing. Both sealing members are non-corrosive and impervious to water or anti-freeze compounds.

Grit-filled water is sealed out here by the water-tight contact of the flexibly mounted carbon seal with the flat ground surface on the pump housing. Water and grit cannot get to the internal parts to wear them away.

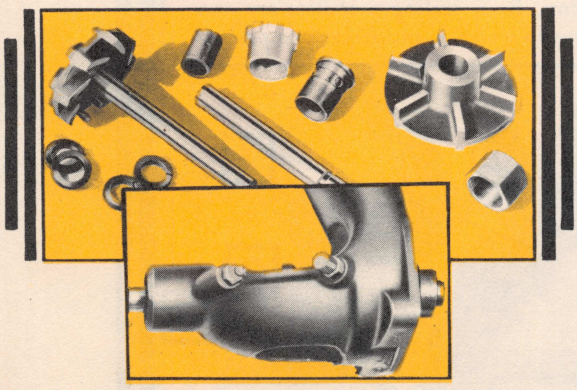
SEE Pages 65 to 76 for ASSORTMENTS of FAST-SELLING PARTS for POPULAR CARS AND TRUCKS

Thompson Factory-type Water Pumps

When you cannot sell a Thompson packless pump the next best bet is a new Thompson factory-type pump at a competitive price. These pumps match factory specifications in every way and give identical service. Factory-type pumps are clearly designated in the pump section of this catalog.

Thompson Factory-type Pump Parts and Rebuilding Sets

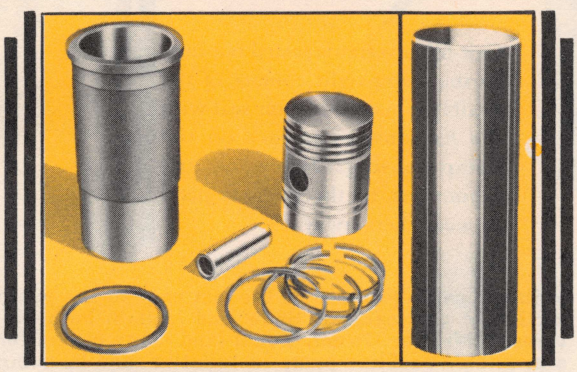
This catalog also lists individual parts and complete rebuilding sets for factory-type water pumps. The parts are strictly factory-specification—stainless



steel or chrome-plated shafts, where used by the car builder; bronze or iron impellers; aluminum or bronze packing nuts; self-lubricating or plain type bearings, etc., etc. The packing is made of a special composition of compressed lead and graphite, moulded to the correct size for each pump.

Thompson WET and DRY Cylinder Sleeves

Thompson Products offers a complete line of highest quality cylinder sleeves, of both "wet" and "dry"



types. "Wet" sleeves are made of a superior chrome-nickle iron alloy. They are supplied in complete assemblies, with pistons and pins fitted and rubber sealing gasket, or the sleeve can be purchased separately.

Thompson CENTRIF-I-CAST "dry" sleeves are the best obtainable at a competitive price and can be had in finished or simi-finished condition, as preferred.

See the cylinder sleeve section of this catalog for complete information on these parts.

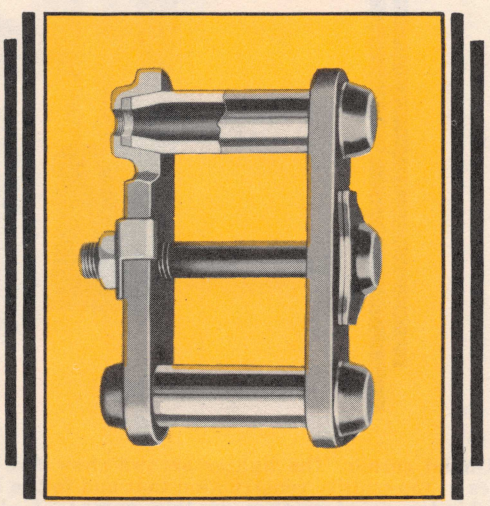
The "Complete Chassis Parts Service"

King Bolts
Spring Bolts
Tie Rod Bolts
Bushings
"Silent U" Shackles
"Tryon" Shackles
Harris Shackle Bushings
Tie Rods
Drag Links

This catalog offers automotive repairmen the most complete line of replacement parts for servicing the spring joints and steering assemblies of cars and trucks. Every greasing, brake-lining and wheel-aligning job offers a good chance to check the need for such replacements. Dangerously worn parts are easily demonstrated to car owners and the "safety appeal" is a powerful selling argument. Don't neglect king bolt, spring shackle and tie rod replacement work. Most shops do—that's just why it's good work for you to go after.

"Tryon" Spring Shackles

"Tryon" shackles started the trend away from old style spring bolts and bushings and were a big original

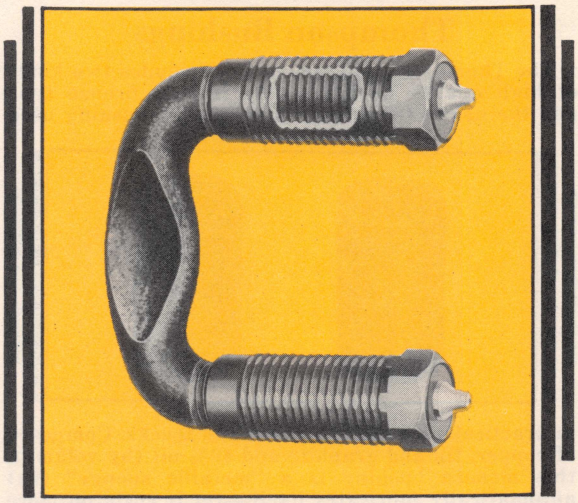


equipment leader for several years. Millions of older cars have this type shackle. A big percentage of these shackles are badly worn and need renewal.

SEE Pages 65 to 76 for ASSORTMENTS of FAST-SELLING PARTS for POPULAR CARS AND TRUCKS

"Silent U" Spring Shackles

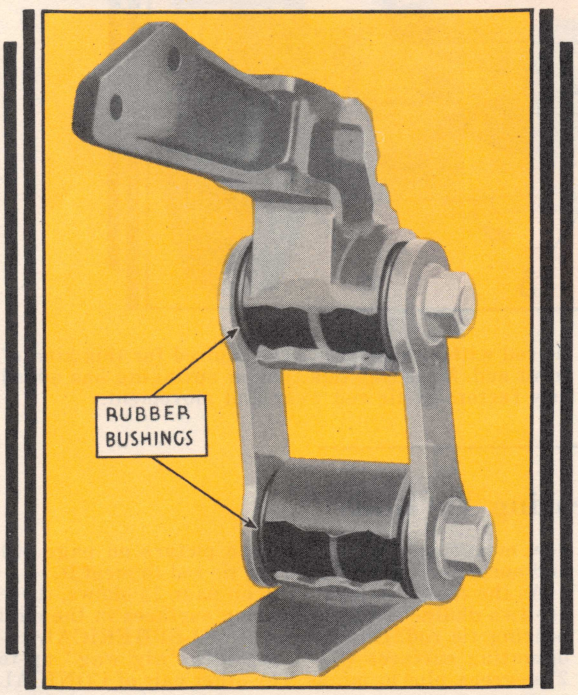
"Silent U" shackles followed Tryons as original equipment leaders and are used on many new cars



of today. The alert repairman will find plenty of "Silent U" shackles that ought to be replaced, too, after three and four years of hard service. The job pays a nice profit on labor and parts.

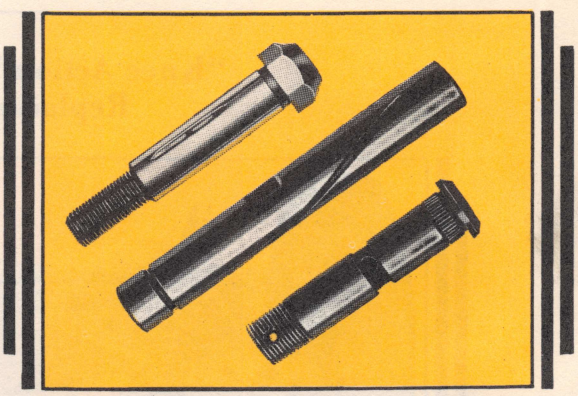
Harris Shackle Bushings

More than ever car builders are turning to rubber as a means of building greater durability, comfort and quiet operation into their product. The 1938 De Soto, for instance, uses rubber in 272 places—40 pounds of it, excluding tires and tubes! Harris spring shackles fit this trend and have been adopted by Nash, Studebaker, La Salle, Cadillac, GMC and Federal trucks, and other manufacturers, some models dating back to 1930. The rubber bushings in Harris shackles oxidize and wear out like any other part and are included among the chassis parts listed in this catalog. Thompson also offers the Harris bushings that are used on Spicer and Monroe shock absorbers.



Thompson Chassis Bolts

Thompson Products is one of the oldest makers of fine chassis bolts for original equipment. All Thompson king pins are nickel steel, which has much higher tensile strength and almost twice the shock resistance of the straight carbon steel king pins frequently offered to the trade. Thompson king pins get four separate heat treatments to withstand the heavy wearing pressures and impacts that today's high speed cars and trucks impose on them. Many king pins, to cut manufacturing costs, are given a single heat-treatment that merely hardens the case without strengthening the core. Look out for the king pin that is sold "at a price." Short cuts in the manufacture of this vital steering part are dangerous. "No matter how cheap a cheap bolt is, it is not worth the price."



For some popular car models this catalog shows two spring bolt numbers. One is slightly higher in price and designated "Thompson Quality." We recommend the use of bolts so designated, although the others listed for the same model are the best possible value at the lower price.

Tie rod bolts disappeared from cars when ball stud sockets replaced yoke-type tie rod ends. However, Thompson's "complete line of chassis parts" includes tie rod bolts and bushings for servicing old cars, trucks and tractors with yoke-type tie rods.

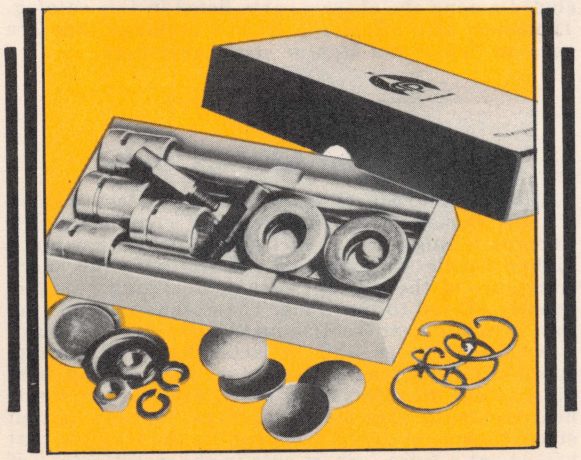
Thompson King Pin Sets

The chassis parts section of this catalog offers seventy-nine different king pin sets for popular cars and trucks. Each set is boxed as a unit consisting of two king pins, bushings, bearings, plugs, lock pins,

SEE Pages 65 to 76 for ASSORTMENTS of FAST-SELLING PARTS for POPULAR CARS AND TRUCKS

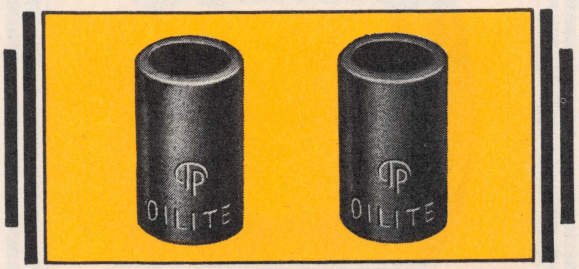
Thompson King Pin Sets (Cont'd)

lock pin nuts, washers, etc.—all the parts needed for a complete renewal of the king pin assembly. Where the orignial equipment pins are chromium or copper plated they are so supplied in these sets. Buying these complete Thompson king pin sets saves time, avoids errors and assures the best possible job of king pin renewal.

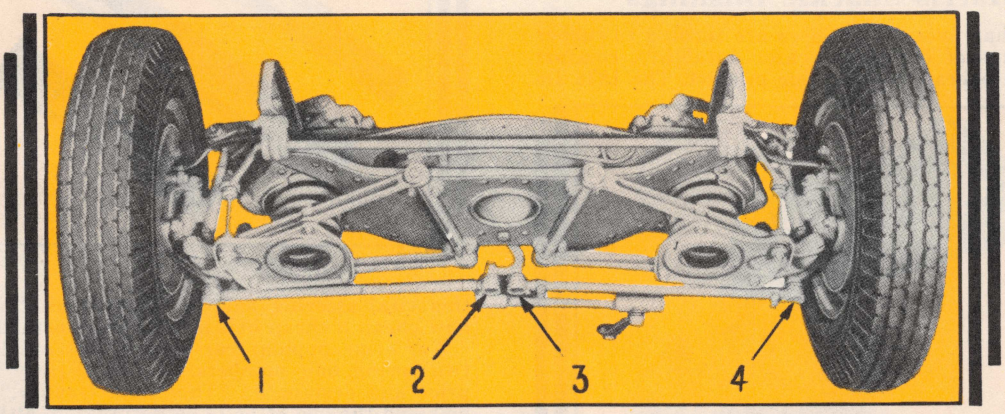


Thompson Bushings

The Thompson replacement line includes two kinds of high quality bushings—the regular bronze type and the newer Oilite (self-lubricating) bushing used in practically all the later cars and trucks. Composed of copper, tin and graphite and 40% oil (by volume), this modern bushing is a "metallic sponge" that automatically lubricates itself—yet it costs no more than the regular bronze type.



"Knee Action" Doubles Tie Rod Replacement Profits



"Knee action" has doubled the profit possibilities in tie rod replacement. As the illustration shows, TWO tie rods with FOUR sockets, instead of a single tie rod with two sockets, are required for this kind of front end. Moreover this type of springing has added new factors of tie rod wear and movement.

Thompson Dual-bearing Tie Rods

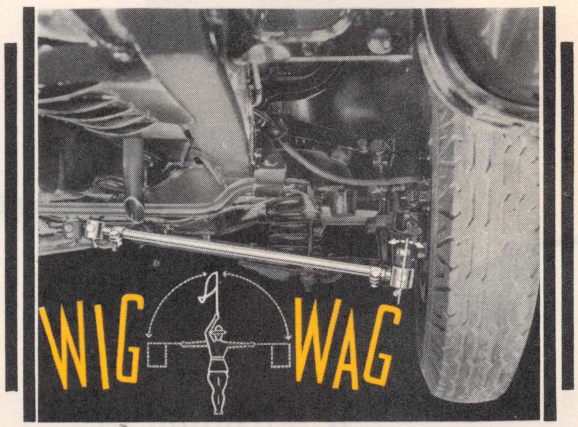
The patented "dual-bearing" tie rod was developed at the Detroit plant of Thompson Products for knee-action cars. These cars required a tie rod joint that would not only turn freely for steering but would allow also for angular movement of the tie rod stud as the front wheels work up and down in relation to the car body. Our Detroit plant engineers called this new movement "wig wag" (see picture on page 15) and perfected the dual bearing tie rod to meet it.

As the cross sectional view on page 15 shows, there are two distinct pairs of bearing surfaces in the dual bearing tie rod. One pair of SEMI-SPHERICAL co-operating surfaces ("A") provides "wig wag" up to 27 degrees, plus or minus. The other pair of CONICAL

SEE Pages 65 to 76 for ASSORTMENTS of FAST-SELLING PARTS for POPULAR CARS AND TRUCKS

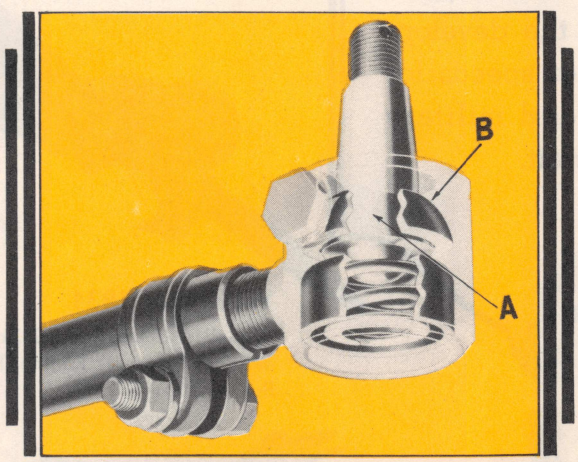
Dual-bearing Tie Rods (Cont'd)

surfaces ("B") permits free rotating of the stud for steering. The spring at the bottom of the sealed socket holds all bearing surfaces in their original close-fitted condition, automatically compensating for wear. The



socket cannot drop from the stud, as the assembly around the stud is larger than the hole in the top of the socket—an ABSOLUTELY SAFE tie rod.

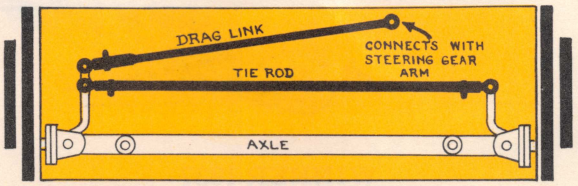
The original equipment list on pages 4 and 5 shows that the Thompson dual-bearing tie rod has become



practically the "universal tie rod" in original equipment—even on cars without knee action. It also gives an idea of the big replacement market for Thompson tie rods. All Thompson tie rods for replacement use are now being made in the dual-bearing design, superseding earlier "Rubbercore" and "Eccentric" types.

Dual-bearing Drag Link—Tie Rod Assembly for Ford V-8 Cars

This complete drag link and tie rod assembly for Ford V-8 cars and ½-ton trucks is a big seller in the Thompson chassis parts line. The four sockets are all dual-bearing construction, duplicating original equipment. The socket on the adjustable end of the drag link is interchangeable with the tie rod socket on the opposite side. The sockets and rods are available separately for replacement. The sockets fit the orig-



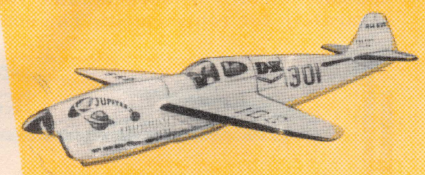
inal intermediate rod. Brake, spring service and wheel aligning stations, as well as general repair shops, will find the complete assembly a highly profitable big-volume replacement specialty.

Chassis Parts Cabinet

This attractive all-steel merchandising stand for repair shops is 60 inches high, 30 inches wide and 8½ inches deep. It is supplied without cost to repairmen who order a $100.00 stock of fast-moving Thompson chassis parts for popular cars and trucks. The repairman can make up his own selection of these chassis parts, with or without the help of the jobber salesman. By placing a unit order of $100.00, there is an extra saving of about $18.00. The parts are in your shop when you need them for rush jobs and impatient customers. Ask your Thompson Products jobber to get one of these stands for you.

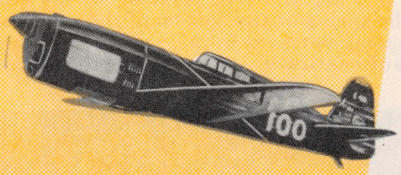
SEE Pages 65 to 76 for ASSORTMENTS of FAST-SELLING PARTS for POPULAR CARS AND TRUCKS

The Thompson Trophy Race



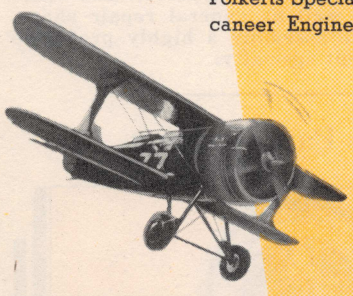
WINNER 1937

Folkerts Special. Menasco Super Buccaneer Engine. Pilot: Rudy A. Kling.



WINNER 1936

French-built Caudron. Renault 6-cyl. in-line Engine. Pilot: Michel De Troyat.



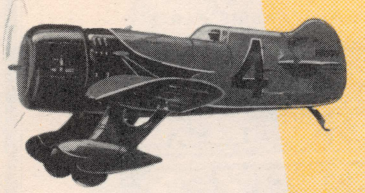
WINNER 1930

Laird Biplane. Pratt & Whitney "Wasp Jr." Engine. Pilot: "Speed" Holman.

WINNER 1935

Howard Special. Pratt & Whitney "Wasp" Engine. Pilot: Harold Neumann.

THE world's most famous annual closed-course airplane speed contest. Established and sponsored by Thompson Products, Inc. Dedicated to the development of higher speeds for commercial and military aircraft.

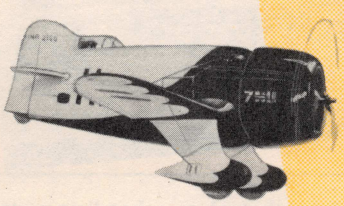


WINNER 1931

Gee-Bee Super-Sportster. Pratt & Whitney "Wasp" Engine. Pilot: Lowell Bayles.

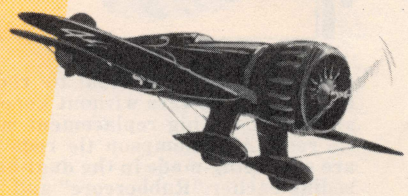
WINNER 1934

Wedell-Williams Special. Pratt & Whitney "Hornet" Engine. Pilot: Roscoe Turner.



WINNER 1932

Gee-Bee Super-Sportster. Pratt & Whitney "Hornet" Engine. Pilot: James H. Doolittle.



WINNER 1933

Wedell-Williams Special. Pratt & Whitney "Wasp Jr." Engine. Pilot: James R. Wedell.

Thompson Products Inc.

Thompson

MACHINE SHOP TIPS

The next forty-seven pages reproduce the "Machine Shop Tips" manual we made up originally for foremen who operate the machine shops of Thompson Products jobbers. The technical and dimensional information it contains is intended to assure that the automotive maintenance trades and car owners will receive the utmost in satisfaction from Thompson replacement parts. We hope all who service automobiles, trucks, buses and tractors will benefit from this information, speed up their repair operations and increase their profits.

★ ★ ★

INDEX

(Familiarize yourself with this index and it will help you to locate the needed information QUICKLY)

General

Page

"A Clean Shop . . . and Clean Parts" 20, 21
Why Cylinders, Pistons and Rings Wear 22
Why Cylinder Wear is Never Uniform 23
Causes of EXCESSIVE OIL CONSUMPTION 24, 25
38 Causes of Engine KNOCK or SLAP 26
Causes of OVERHEATED Engines 27
Tips on ENGINE RECONDITIONING 27

Pistons

Causes of PISTON FAILURE 38, 39
CAM GRINDING (General Instructions) 40, 41
CAM GRINDING T-SLOT and U-SLOT Pistons 42, 43

CAST IRON PISTONS:

General Instructions for Grinding 44
Special Instructions for Grinding

C-8, C-241, C-646, C-673 . . . . Pg. 45
C-700, C-800 . . . . . Pg. 46
C-836 . . . . . Pg. 45
C-850 . . . . . Pg. 46
C-873 . . . . . Pg. 45
C-974 . . . . . Pg. 46

ALLOY PISTONS:

General Grinding Instructions 50
Special Instructions for Grinding

American Austin, **L-480, L-532** Pg. 55
Dodge Truck, **L-623,** solid skirt Pg. 53
Ford, **L-400, L-550, L-650** . . . . Pg. 52
Ford (60 h.p. V-8), **L-651** . . . . . Pg. 51
Ford V-8, heavy duty, **L-700** . . . Pg. 51
Hudson-Essex, **L-484, L-516, L-517, L-552** . . . Pg. 53
Mack Truck (BG), **L-503** . . . . . Pg. 55

AEROTYPE (Heavy duty) Pistons, General Instructions 54
AEROTYPE (Special Instructions), **L-304, L-305, L-490, L-501, L-502** . . . 54
NARROW INVAR STRUT PISTONS, General Grinding Instructions . . . 47
BROAD INVAR STRUT PISTONS, General Grinding Instructions 48
SPECIAL BROAD INVAR STRUT (**L-595**) 49

INDEX (*Cont'd.*)

Page

DOUBLE INVAR STRUT, General Instructions. 49
T-SLOT PISTONS WITH MILLED RELIEF, General Instructions. 56
TIN-PLATED Pistons. 57
ALCOTED PISTONS. 57
DIAMOND-BORED PISTONS. 58
THOMPSON PISTON WRAPPERS. 59

Piston Rings

IMPORTANCE of Piston Ring End Clearance 63

Connecting Rods

Proper ALIGNMENT of CONNECTING ROD ASSEMBLY. 64

Valves

Thompson AEROTYPE (Stellited) Valves. 28
Instructions for Installing AEROTYPE Valves. 29
VALVE TROUBLES—Their Causes and Cures. 31, 32, 33

Valve Guides

Instructions for Using the Thompson Valve Guide Tool. 30

Water Pumps

Instructions for Installing Thompson Packless Pumps. 34

Cylinder Sleeves

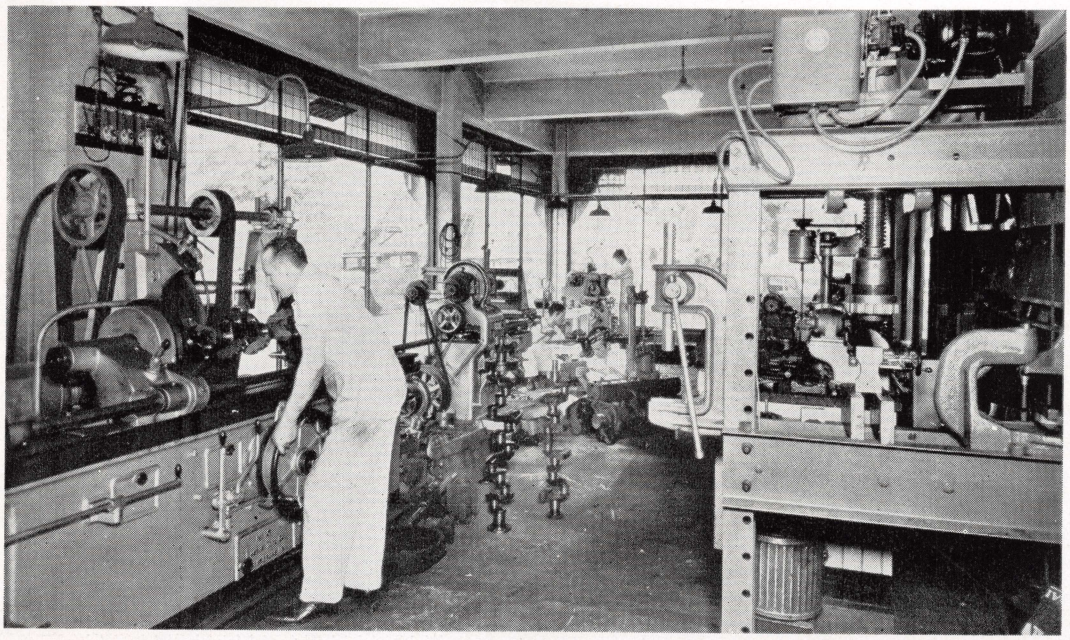
NITRICASTIRON Sleeves, Instructions for Installing. 35, 36
WET SLEEVES, Instructions for Installing. 37
DRY SLEEVES, Instructions for Installing. 37

Cylinder Heads

How to Install to Prevent Engine Distortion. 60, 61, 62

★ ★ ★

A Clean Shop . . . .



A BUSY shop need not be a dirty one as cleanliness makes for efficiency and also breeds the confidence of your trade. Keep it spic and span. Keep your machinery, such as grinders, lathes, etc., clean, as the accuracy of many a machine is destroyed by abrasives and cuttings that are never cleaned off the ways and other parts upon which alignment depends.

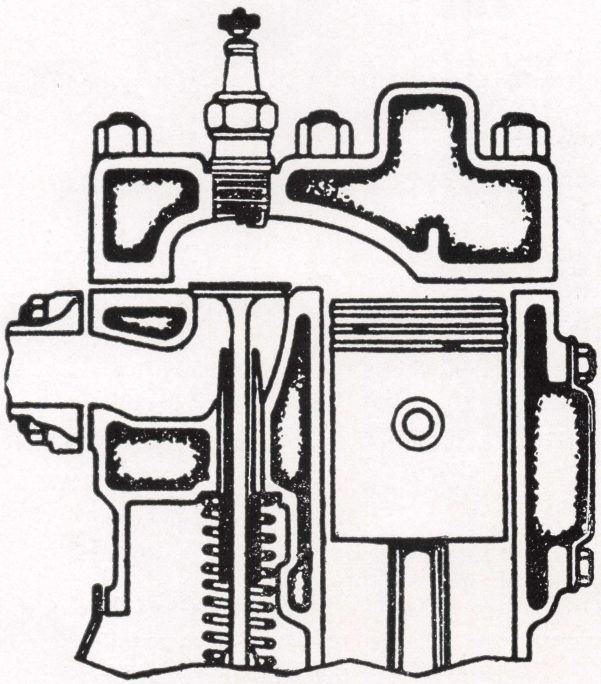
In many a shop we have seen deep ridges worn in the ways of grinders and lathes on almost new equipment because of this neglect. These same shops wondered why pistons were being finished out-of-round and taper; also why they were having piston trouble on various installations. The answer is a slovenly, careless and dirty shop.

Hand tools, reamers, etc., should be arranged on tool boards above the bench out of the way where they can be easily reached. They, too, should be wiped clean after use and put in their places. Remember a tool in place is worth two that cannot be found.

A little paint now and then will do wonders on walls, floors, benches and equipment. Experience has proved that aluminum paint on equipment is the best that can be used for it brightens up a dark shop and makes close work easy as it reflects the light. Besides, it makes your shop and equipment stand out. Such a neat and clean shop creates confidence in your workmanship.

★ ★ ★

. . . . and Clean Parts



Shaded portions show accumulations of scale and rust

To speed up all work going through your shop we suggest that all parts such as cylinder blocks, crankcases, gears, etc., be first given a thorough cleaning as it makes them easier to handle, and possible to detect defects such as cracked blocks, valve seats, etc.

In this process all sludge, rust and scale should be removed from the water jackets of the block for when cylinder bores are reconditioned to large oversizes such as .050 or .060 this thins down the cylinder walls and if the water jackets are left full of rust and scale the engine will over-heat, creating cylinder and piston distortion often causing them to seize.

This naturally reflects on your workmanship and the products installed, and it is natural that the owner or repairman should assume that pistons, etc., have been fit too tight. So, make sure that all water passages are clean and that the radiator flows the prescribed number of gallons of water per minute.

When cylinder blocks are ready for delivery—after new bearings have been installed, line bored, etc., cylinders rebored, honed or ground, and all parts are ready for final assembly—they should all be washed with soap and water to remove abrasives, cuttings, etc., that gasoline will not take out. Many shops provide a small bag of soap chips which is attached to the block with instructions that after the repairman has ground the valves and before the piston assembly is installed the valve ports and cylinder walls be thoroughly washed with soap and water. Many a good shop job has been ruined by grinding compound being drawn into the cylinders through the inlet ports the first time the engine is started because of neglect in cleaning them out properly.

An efficient tank for cleaning engine parts

★ ★ ★

Why Cylinders, Pistons and Rings Wear

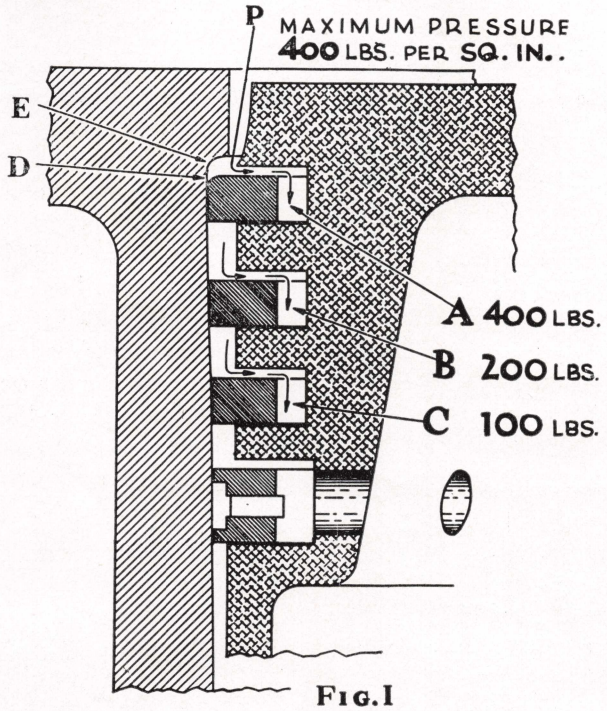


FIG. I

This picture shows the results of block pounding and why cylinders wear taper.

Most engineers agree that cylinder, piston and ring wear is the result of the following factors:

(1) Dirt that is drawn into the engine through the carburetor and from dirty oil containers (air and oil clarifiers have helped here tremendously).

(2) Block pounding: A combination of combustion force behind rings and inertia of the piston.

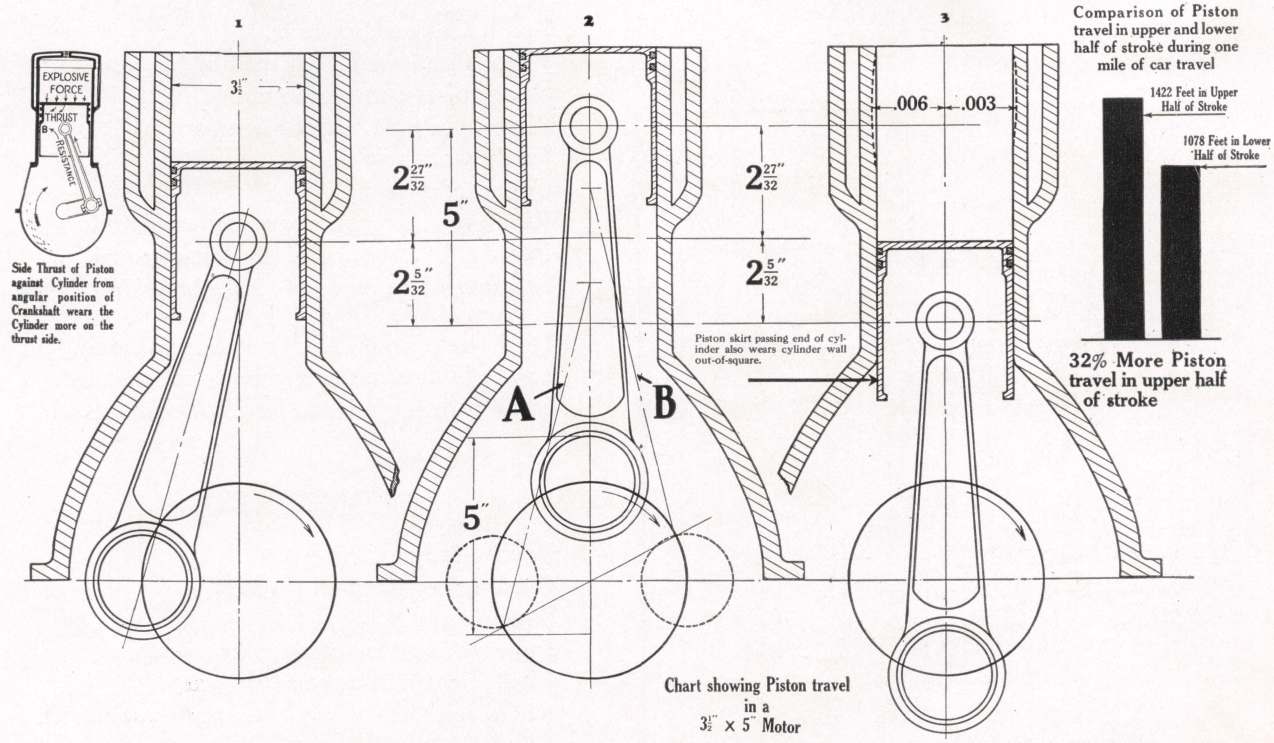
(3) Cutting action of the rings: Prevails during the entire stroke, but the most damage is done in the upper half of the cylinder due to the greater pressure behind the rings at this point; together with the increased speed of the pistons. (See illustration.)

(4) The forming of abrasive oxides through corrosion during the combustion.

(5) The uneven travel of the piston throughout the stroke because of the relative angularity of a connecting rod to the crankshaft and piston. (See illustration.)

★ ★ ★

Why Cylinder Wear Is Never Uniform



The above diagram shows why pistons travel faster and farther in the upper half of the stroke than in the lower half. These diagrams are scale drawings of a 3½ x 5 engine 3000 revolutions per mile in high gear.

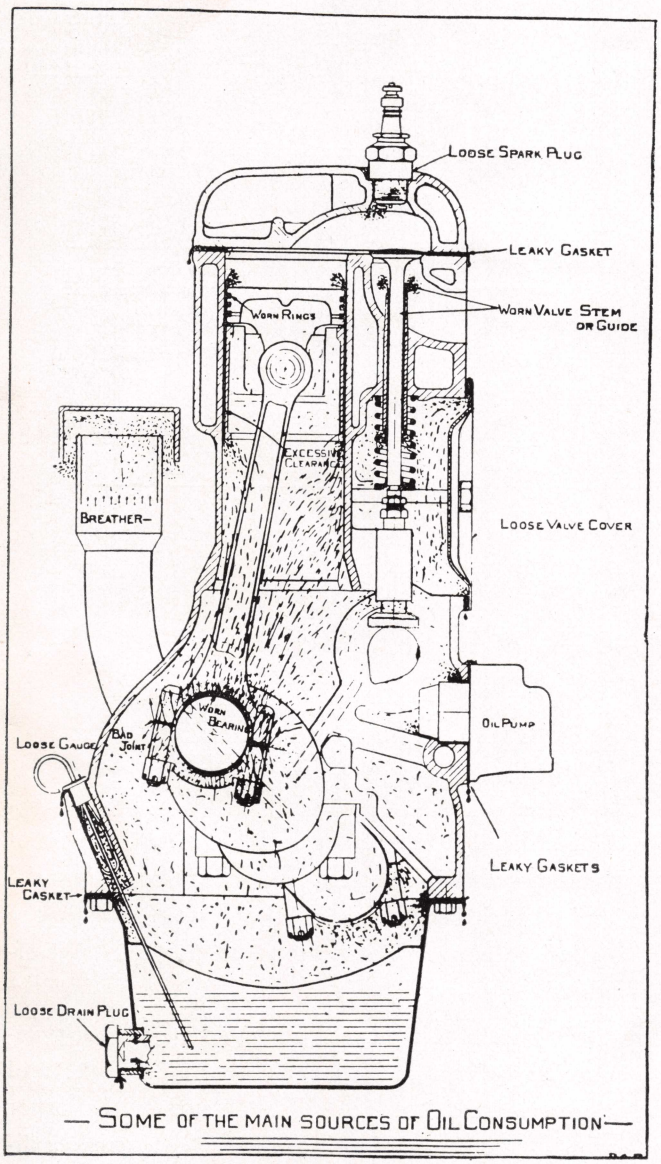
As the piston goes up or down from bottom or top dead center its speed and travel increases 32% during the upper half of the stroke due to the expanding of the connecting rod angles at A and B which contract when the rod is in the lower half of the stroke, as shown in Diagram No. 2. This means that the piston in one mile of car driving travels 1422 ft. in the upper half of the stroke and only 1078 ft. in the lower half, making 344 more feet in the upper half, or 344,000 ft. for 1,000 miles of car driving.

This, plus the cutting action of the rings because of the pressure behind them on the combustion stroke and the thrust action of the piston, causes the cylinder to wear not only taper but also out-of-round, as shown by Fig. 3.

Cylinders in this condition should be properly reconditioned making the hole round, straight and polish-finished to the highest degree. In other words, put the engine in as near the same condition as when it rolled off the assembly line brand new, for make-shift methods of any kind can only give limited satisfaction and results.

★ ★ ★

Causes of Excessive Oil Consumption



— Some of the main sources of Oil Consumption —

PISTONS

Poorly designed pistons.
Pistons improperly finished or fitted.
Snaky piston ring grooves.
Piston pin hole out of alignment.
Badly worn pistons.
Collapsed pistons.
Ring grooves worn overwidth or flared.
Pistons distorted or badly out-of-round.
Insufficient number of drain holes in oil ring grooves.
Drain holes in oil ring grooves too small.
Lower land of oil ring groove not beveled.
Lack of drain holes in bevel or chamfer.

PISTON RINGS

Poorly designed rings.
Cheaply constructed rings.
Snaky rings.
Improper seating of rings in groove.
Insufficient clearance at ring gap.
Rings with insufficient tension causing ring flutter.
Out-of-round rings.
Warped or twisted rings.
Rings fitted too tight in grooves.
Wrong size rings.
Barreled face piston rings caused by rocking motion of piston, or piston vibration.
Unequalized wall pressure of rings.
Insufficient ventilation in oil rings, slots too narrow.
Slots in oil rings clogged with carbon.

PISTON PINS

Excessively worn piston pins.
Wrong type pin.

VALVES

Worn intake valve stems and guides.
Leaky or burnt valves.

Continued on following page

★ ★ ★

Causes of Excessive Oil Consumption(*Cont'd.*)

Improperly timed valves; intake valve timed too late.
Improper tappet adjustment.

CONNECTING RODS

Bent or twisted rods.
Loose or elliptical shaped connecting rod bearings.
Improper shimming, or worn and broken shims.
Rifled connecting rods with loose piston pins, or piston pins installed upside down, or wrong pin.
Scored connecting rod bearings; burnt or cracked babbitt.
Spurt holes in worn connecting rods.

MAIN BEARINGS

Excessively worn main bearings.
Oil leaking past front and rear main bearings.
Scored or burnt main bearings.
Too much oil thrown out of main and connecting rod bearings which cannot be controlled by piston rings.

CRANK-SHAFT

Bent crank-shaft.
Excessively worn crank-shaft.
Journals scored and out-of-round.

CRANK-CASE

Crank-case gasket leaks.
Cracked crank-case.
Front and rear main bearing oil retaining washers worn out.
Too high an oil level in crank-case when splash system is used.
Broken oil pipe in crank-case spraying oil cylinder bores.
Breather pipe too small or clogged, causing excessive pressure in crank-case.
No baffle in breather pipe causing oil to blow out.

CYLINDER BORES

Bores excessively worn, tapered, or out-of-round.
Ledge at top and bottom of ring travel.
Wavy cylinder bores caused by improper cylinder reconditioning, heat distortion, or unusual wear.
Bellied cylinders.
Depressions in cylinder walls caused by rocking pistons, piston vibration, or collapsed pistons.
Scored cylinder bores.
Rough finish in cylinder bores causing rapid wear of rings.
Cylinder head pulled down improperly causing cylinder distortion.

ALIGNMENT

Cylinder bores worn or refinished out of alignment.
Cylinder block out of alignment with crank-case.
Piston and connecting rod assembly out of alignment.
Main bearings and crank-shaft out of alignment.
Poor workmanship in assembling motor.

CLEARANCES

Excessive clearance between piston and cylinder bore due to wear, or improper fitting.
Excessive clearance in main and connecting rod bearings due to wear, or improper fitting.

IGNITION

Ignition timing incorrect.
Defective ignition parts, or improper adjustment.
Defective spark plugs.

CARBURETION

Faulty carburetion causing dilution of oil on cylinder walls and further dilution in crank-case.
Defective vacuum tank.

AIR CLEANER

Inefficient air cleaner will allow dust and abrasive matter to get into the engine causing rapid wear of rings, pistons, and cylinder bores, thus resulting in excessive oil consumption.

LUBRICATION

Poor grade of oil.
Thin oil.
Dirty oil.
Abrasive in crank-case.
Overheated engine thinning oil.

★ ★ ★

38 Causes for Knock or Slap In An Engine

1. Loose piston.
2. Loose strut.
3. Cracked piston.
4. Piston badly out-of-round.
5. Piston scored.
6. Piston pin bushing worn.
7. Piston pin worn.
8. Piston pin loose in piston one side or both.
9. Rod too close to pin boss.
10. Piston pin out of center with piston when clamped rod is used.
11. Bent connecting rod.
12. Twisted connecting rod.
13. Worn or bent connecting rod bearing.
14. Broken connecting rod bolt.
15. Connecting rod bolts loose or stretched.
16. Connecting rod piston pin clamp bolt loose.
17. Piston or ring striking ledge at end of ring travel top or bottom.
18. Incorrect alignment of piston, pin and rod assembly.
19. Piston striking cylinder head or gasket.
20. Worn cylinder walls and pistons; too much clearance between cylinder bores and pistons.
21. Slotted side of piston installed wrong side.
22. Loose bearings.
23. Loose rear main bearing.
24. Loose front main bearing.
25. Broken or loose main bearing stud.
26. Burnt or cracked main bearing.
27. Bent crank-shaft.
28. Too much crank-shaft end play.
29. Too much cam-shaft end play.
30. Loose flywheel.
31. Cracked or loose bearing supports.
32. Loose or worn timing gears or chains.
33. Loose or worn cam-shaft bearing.
34. Loose valve push rods, tappets, tappet guides, valve guides, rocker arm bushings, rocker arm shafts, bent valves, etc.
35. Flat or worn cams.
36. Flat or worn cam roller and pins.
37. Loose or worn clutch parts.
38. Loose vibration dampener.

Causes of Overheated Engines

Clogged Radiator.

Clogged Hose and connections.

Clogged cylinder block and water passages, with scale, rust and sludge.

Tightly fitted pistons.

Tightly fitted piston pins.

Bearings, mains and con rods too tight.

Tightly fitted rings. Too small clearance at gap.

Timing too late.

Valve timing incorrect.

Defective condenser.

Defective coil.

Improper lubrication.

Lack of lubrication.

Loose or broken fan belt.

Radiator core stopped with dirt, insects, etc.

Faulty thermostat in motor or heater line.

Low water level due to leakage.

Defective spark plugs.

Leaks in high tension system.

Combustion chamber overloaded with carbon.

Stuck automatic spark control.

Brakes dragging.

Tips on Engine Re-conditioning

Keep your cylinder reconditioning equipment clean, properly adjusted and well oiled. Keep the cutter slot in the cutterhead of your boring machine free from dirt. Before starting to rebore the block, carefully file off all high spots on the face of the block casting, making sure that the threads of the stud holes are filed flush with the face. In pulling down cylinder heads these threads and the metal around the stud holes are pulled up slightly and if not filed off the base of the boring machine will not contact the face of the block properly, causing the hole to be bored out of alignment.

Use a knife-edged protractor to ascertain the relation of the bore to the face of the block. Some cylinders are not at a 90 degree angle to the face of the block—by this we mean crosswise—and many worries and bad jobs can be eliminated if this is checked before starting.

Work to standards. If you find a cylinder will clean up to .020 oversize, make it .020, not .018 or .022. The closer you hold to standard oversizes, the better the job. Making all cylinders the same, reflects greatly on your workmanship.

★ ★ ★

Thompson Aerotype Valves

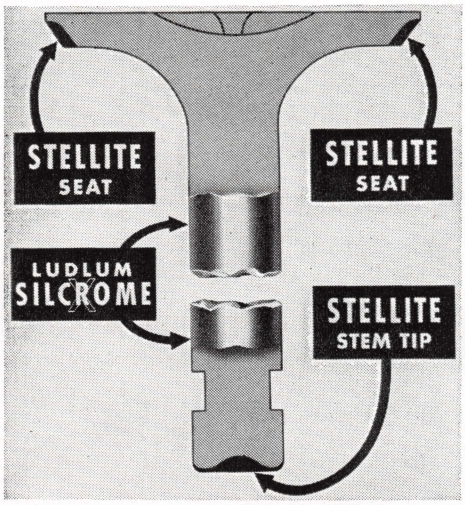
Today many of the popular trucks on the road are powered by engines that were designed for touring car use with high speed gear ratios of approximately four-and-one-half-to-one. However, when these engines are placed in a truck, the gear ratio as a rule in high is about seven-to-one and when this truck is over-loaded and it is necessary to pull in second, the gear ratio goes up as high as thirteen-to-one, or better and in low sometimes as high as thirty-to-one.

This increased engine speed naturally increases the temperature of the valve because it is exposed more times per minute to the exhaust flame and does not have sufficient time on the seat to dissipate the heat from the head into the block. This causes corrosion and oxidization which brings about progressive disintegration of the valve. This is also true on regular bus and truck engines that run at high sustained speeds for long periods.

To take care of extreme conditions of this kind Thompson Products have produced a special valve known as the "AEROTYPE". This valve is made of the same material as our famous aircraft valves, assuring an operator longer life and greater mileage between valve grinds.

Certain Aerotype valves differ in some respects, one from another. All of them are made from the same aircraft valve steel. In certain engines this better steel alone will suffice. In others it is necessary for us to "puddle" Stellite on the face of the valve as this expensive metal retains its "red hardness" and resists seat battering often caused by heavy valve springs and a sharp cam drop.

Still others, because of certain engine characteristics have Stellite welded on the tip to resist wear and mushrooming at this point. In other words, this special Aerotype valve is actually tailor-made to suit each individual engine.



Many jobbers have found that the best method of presenting Aerotype valves to their important customers is from the angle of valve mileage, rather than initial cost. Big scale operators buy tires on a mileage basis, and will buy Aerotype valves the same way.

The period between valve grinds is lengthened materially with this new type valve, reducing the unproductive hours of busses and trucks while the engine is tied up. In some engines we have succeeded in increasing the period between valve grinds from 15,000 to as high as 85,000 miles. Every important fleet superintendent is looking for performance of this kind. Greyhound, Missouri Pacific Transit, Safeway Buses, as well as many other operators are putting in these new Aerotype valves in all their equipment as fast as they come in, having found the results to be phenomenal.

This high quality Aerotype valve, made to aircraft standards, gives you an opportunity to make important contacts with large fleet operators that will bring you additional business and at the same time provide you with a splendid margin of profit. This is another example of Thompson's progressiveness in manufacturing.

★ ★ ★

Instructions for Installing Thompson Aerotype Valves

1. Always grind seat in cylinder block or head to be absolutely sure that the valve seat is concentric with the valve guide and free from pits, cracks, or burned spots.

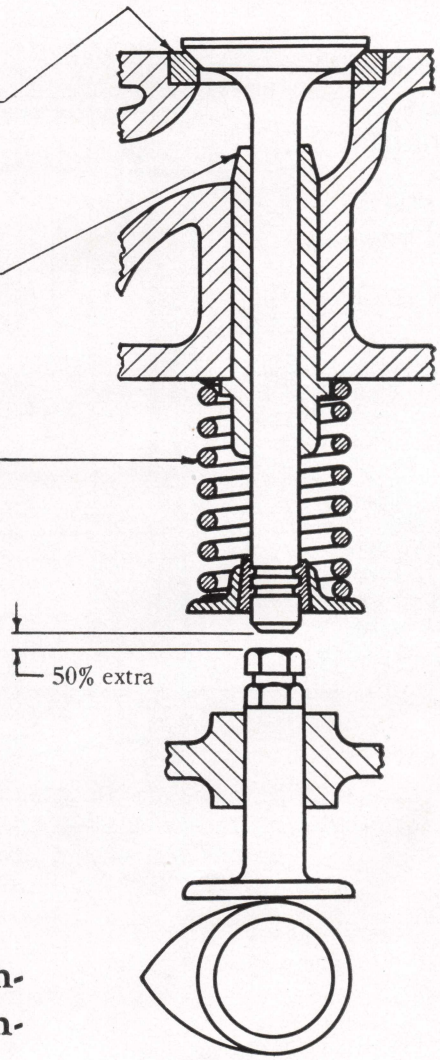
2. When installing Aerotype Valves always install new guides. New guides are necessary to give proper clearance on the valve stem.

3. Always check tension in valve spring. If springs show any loss in pressure they should be replaced.

4. **Important.** Aerotype Valves must have 50% more tappet clearance than the ordinary valves.

Example:

If ordinary valve requires .006 clearance, Aerotype Valves should have .009 clearance.



For a super-job on bus or truck engines, install Aerotype Valves, Graphited Valve Guides, Durachrome Valve Insert Seats, Aerotype Pistons, Chromeplated Piston Pins and Nitricastiron Cylinder Sleeves.

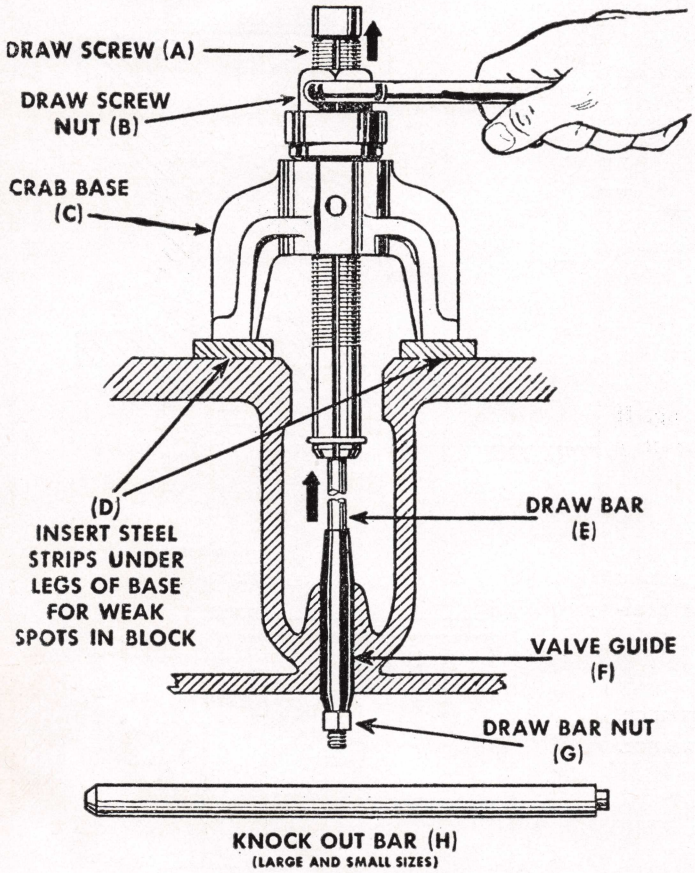
★ ★ ★

Instructions for Using Valve Guide Tool

This Kit consists of the following:

1 crab (base) with draw screw and nut—fig. "C"
1 5-16" drawbar with nut—fig. "E"
1 3-8" drawbar with nut—fig. "E"
1 5-16" knock-out bar—fig. "H"
1 3-8" knock-out bar—fig. "H"

In case of loss or damage any of these parts can be replaced at a nominal price by your jobber.



To Remove Old Guides

Drive old guide out with the knock-out bar "H" or draw out with the drawbar "E". ONLY STRAIGHT SIDE GUIDES CAN BE DRAWN OUT. Flanged type guides must be driven out with knock-out bar "H".

To draw old guide out remove nut "G" from end of the drawbar "E", drop the drawbar down through the guide hole and re-attach nut "G". Take up on the draw screw nut "B" with an open end wrench until valve guide breaks loose and can be taken out through valve port.

Caution—Some old guides become badly rusted and corroded, making removal difficult. In such cases avoid unnecessary strain on the drawbar by first loosening guide with knock-out bar.

To Install New Guides

Drop drawbar "E" into the valve port. Slip the new guide up on the drawbar, fastening it there with drawbar nut "G". Then take up on the draw screw nut "B" with an open end wrench, slowly pulling guide into proper position.

Both types of guides, flanged and straight side, can be installed with this Valve Guide Tool.

Two drawbars "E" and two knock-out bars "H" (for 5-16" and 3-8" holes) are supplied—be sure to use the proper diameter drawbar as it will draw the guide in more evenly and will put less strain on the drawbar.

CAUTION—When installing valve guides care must be taken to avoid burring or injuring the guide bore in any way. Drawbars are made of a special alloy steel of great tensile strength, but the diameter is limited by the size of the valve guide hole and care should be taken to avoid any unnecessary strain on drawbars.

IMPORTANT. When setting tool up, place two long pieces of steel of equal thickness (Fig. "D") under each foot of the base so that pressure will be widely distributed. This avoids breaking block in any weak place.

★ ★ ★

Valve Troubles—their Causes and Cures

I. **Burned Seat.**

(a) Insufficient tappet clearance. (Figure 1.)

(b) Valve held open by deposit on valve stem; caused by poor oil, very lean mixture, bell mouthed guide, sloppy guide. (Figures 2 and 3.)

To aid this condition:

1. Cut guide flush with block. (Figure 4.)
2. Put relief on valve stem. (Figure 5.)
3. Counterbore guide. (Figure 6.)
4. Slotted guide helps in some cases. (Figure 7.)
5. Use heavier springs to help cut deposit.
6. Use guide clearance as small as practicable.

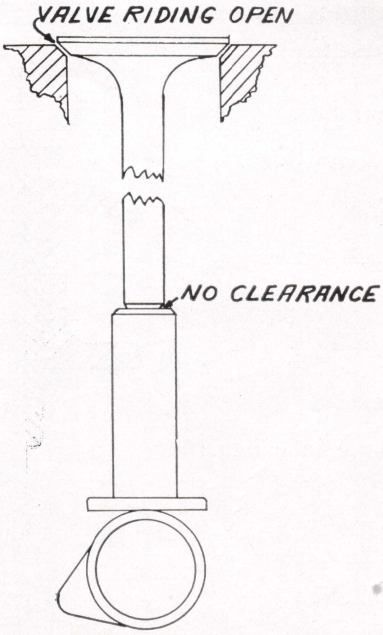


Fig. 1

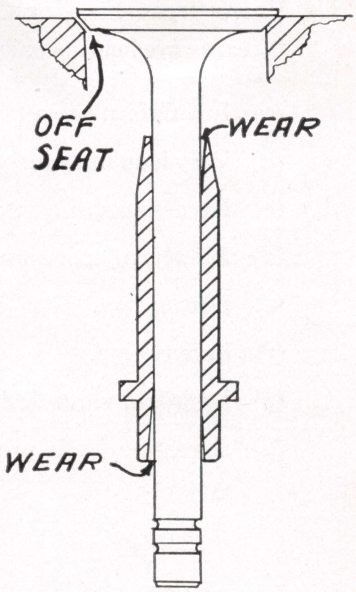


Fig. 3

Worn guide allows valve to be thrown out of alignment.

II. **Broken Valves**—caused by:

(a) Sloppy guide. (Figure 3.)

(b) Weak springs—valve thrown from cam.

(c) Warped deck, out-of-round block seat. (Same effect at seat as Figure 3.)

(d) Rough tool marks, sharp corners. (Figure 8.)

(e) Sloppy fit of retainer lock.

(f) Cocked spring or retainer cap.

(g) Most failures are fatigue, a small rupture gradually enlarging. (Figure 9.)

(h) Using governed motor as brake on hills, running beyond designed R.P.M. —valves thrown from cam.

(i) Defective valve forging.

(j) Excessive heat. (Figure 12.)

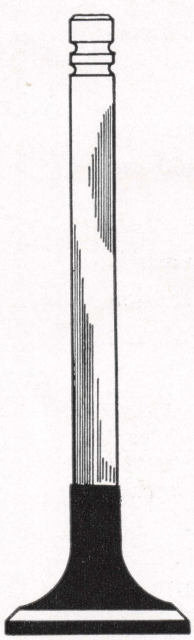


Fig. 2

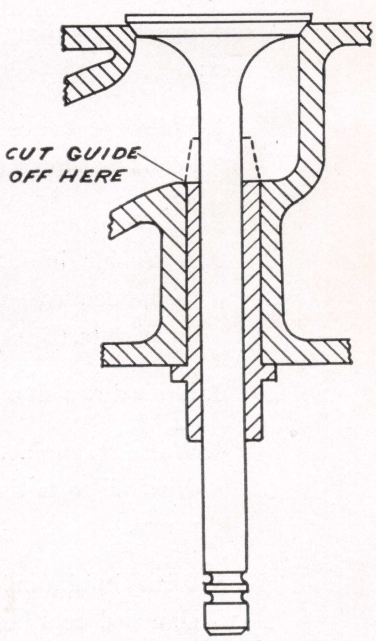


Fig. 4

★ ★ ★

Valve Troubles—their Causes and Cures (*Cont'd.*)

III. **Valve Stretching or Cupping**—caused by excessive heat, usually due to:

(a) Insufficient tappet clearance.

(b) Very lean mixture on heavy duty.

(c) Excessive spring tension.

(d) Blowby at spot on seat.

(e) Detonation.

(f) Late timing.

(g) Improper valve design.

(h) Excessive back pressure in exhaust system.

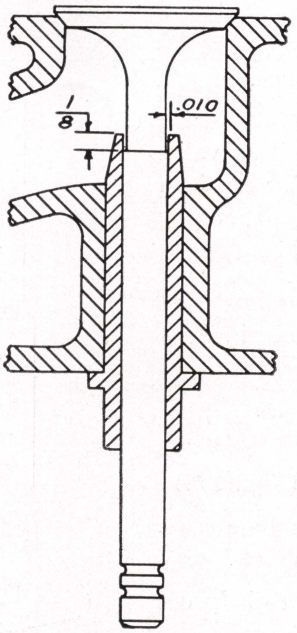


Fig. 5

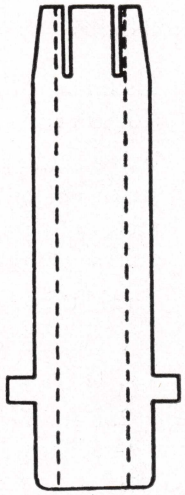


Fig. 7

IV. **Distorted Decks and Block Seats**—caused by:

(a) Distortion COLD due to pulling studs in too tight or pulling head down unevenly—valves can be unseated by improperly installing head. To correct:

1. Follow sequence for various type heads as shown on pages 60 and 61.
2. A tension indicating wrench is recommended—use same tension on all nuts. (See Pages 60, 61, 62.)
3. Draw down all nuts lightly.
4. Warm up engine. Starting again, draw all nuts tight with engine warm.
5. With aluminum heads, warm engine and cool before final tightening.

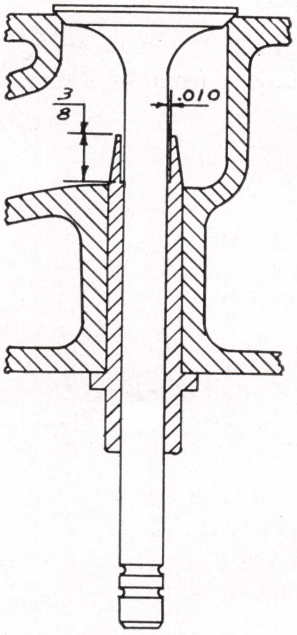


Fig. 6

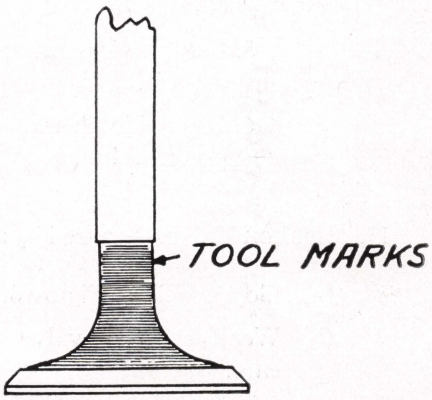


Fig. 8

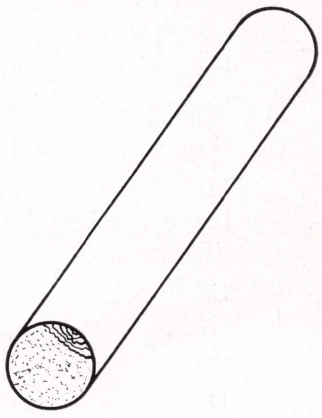


Fig. 9

★ ★ ★

Valve Troubles—their Causes and Cures (*Cont'd.*)

(b) Distortion HOT, due to:

1. Clogged water passages or steam pockets.
2. Inadequate pump.
3. Slipping fan belt.
4. Spark plugs.
5. Detonation or pre-ignition cause cracked blocks.

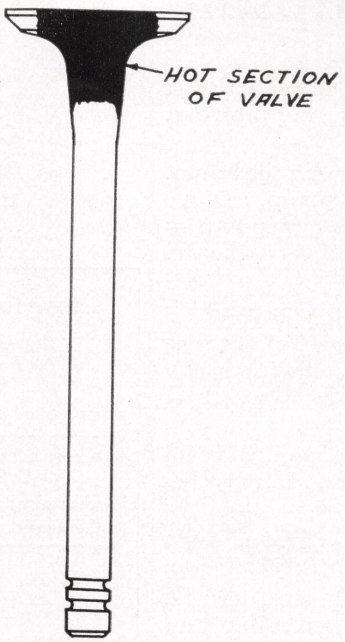


Fig. 12

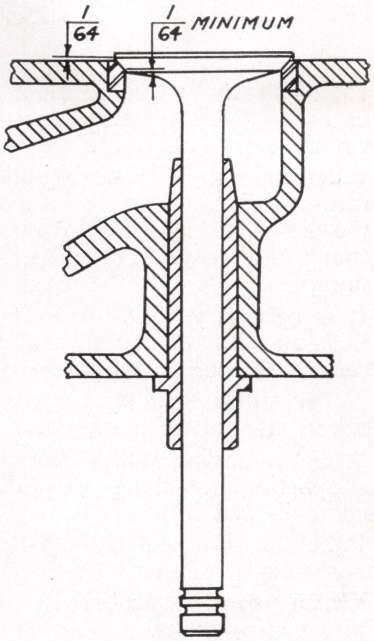


Fig. 13

V. **Valve Seats Worn Badly.** (Particularly intake valve.)

(a) Defective air cleaner.

VI. **Block seat pounded.**

(a) Correct with hard valve seat insert.

VII. **Fit valve properly for best performance.** (Figure 13.)

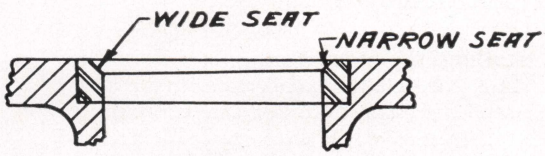


Fig. 14

VIII. **Block seat or seat insert must be concentric with guide**—otherwise result will be as in Figure 14.

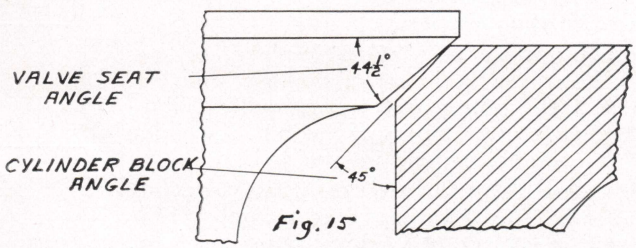


Fig. 15

IX. **If valves refuse to seat properly** after initial run, try this: grind valve seat ¼ to ½ degree less than block seat—install without grinding. (Figure 15.)

X. For best valve job, **grind** block seat and lap valves.

★ ★ ★

Instructions for Installing Thompson Packless Pumps

IMPORTANT: There must be no end thrust on pump shaft to interfere with spring pressure, which keeps seals tight.

When a new pulley is not supplied with the pump, measure distance "D" on the old pump, remove the old pulley and press it on the new pump so that the distance "D" is the same as on the old pump.

It is necessary to check that the pump pulley lines up with the driving pulley. If it does not, remove the pump again to correct pulley position.

Never push the pulley on the new shaft when the pump is on the engine.

When removing pulley from old pump, avoid supporting hub flange of pulley, as it may become distorted.

Pulley must have .002 to .004 press fit, and must not run out. Use only a pulley in good condition.

When pressing pulley on new pump shaft, place support under shaft at impeller end so that no pressure is applied at outer edge of impeller. If pump has cover plate over the impeller the cover should be removed before pressing the pulley into place. If cover is not removed the seals will be damaged.

Before installing the new pump, see that the gasket surfaces are clean and scrape any excess scale or rust out of the cylinder block opening, as it might interfere with the new full-size impeller.

In some engines a composition thrust button is located in the cylinder block opening that may interfere with the new impeller. If so, it should be knocked out with a small chisel, as it is not needed with the new pump.

After the pump has been bolted in place, see that the impeller turns freely before the belt is put on. Also check the pump and driving pulley alignment to insure true running of the belt. Excessive tension on the belt should be avoided.

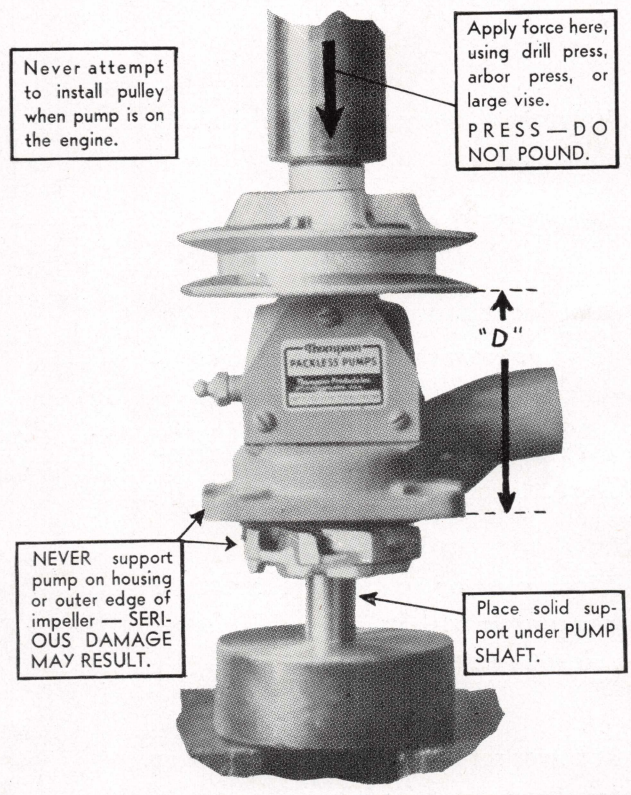
When assembling fan belt on pulley, do not push shaft toward pump housing. This compresses spring and opens seals.

This pump is packed with a good grade of grease and tested thoroughly before leaving the factory. However, it is advisable to force in additional light grease to make sure that it has again penetrated into the bearings.

GREASE EVERY 1,000 MILES with light wheel-bearing grease until pump is completely filled.

How to Install Old Pulley on Packless Pump

Read Carefully — Important



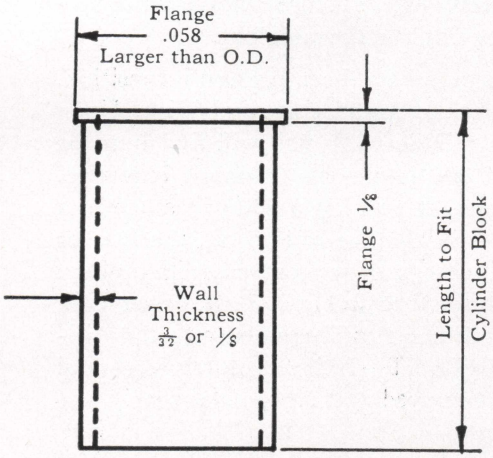
CAUTION: DO NOT DISASSEMBLE PUMP

If pump has cover over the Impeller, cover should be removed before pressing pulley on.

★ ★ ★

Nitricastiron Cylinder Sleeves

Installation Instructions



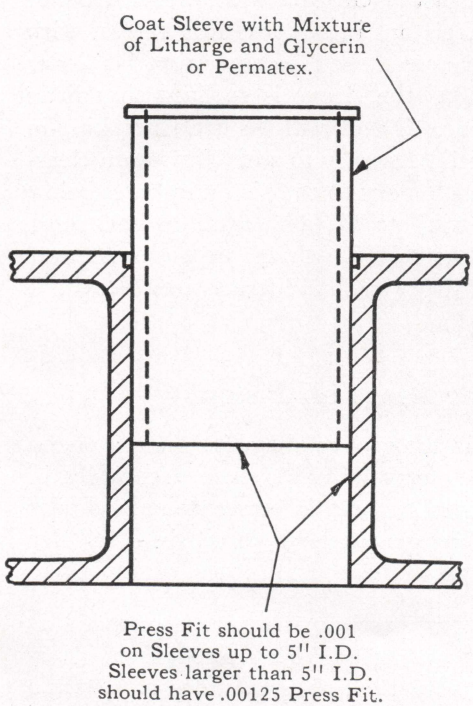
General Design of T.P. Nitricastiron Sleeves

Sleeves up to and including $3\frac{3}{4}''$ Bore are supplied with $\frac{3}{32}''$ Wall Thickness.

Sleeves larger than $3\frac{3}{4}''$ Bore are supplied with $\frac{1}{8}''$ Wall Thickness.

Sleeves larger than $3\frac{3}{4}''$ Bore may be supplied with $\frac{3}{32}''$ Wall on request.

When ordering Nitricastiron Sleeves always give Bore and Length of Sleeves desired, and state Motor Name and Model for which it is to be used.



Read very carefully! Extreme care should be exercised in the installation of Nitricastiron sleeves.

Before boring the cylinder to receive the sleeve, carefully measure the outside diameter of the Nitricastiron sleeve. Measure this at three points—approximately $\frac{1}{2}''$ below the top flange, at the center, and at a point approximately $\frac{1}{2}''$ above the lower end of the sleeve. At these three points, find the smallest and the largest measurement, writing them down on a piece of paper. When you have finished, you will have six measurements—two at each point. Adding these and dividing by six will give the mean O. D. of the sleeves. If the bore of the sleeve is under 5", deduct .001 from your mean diameter. If the bore is over 5", deduct .00125.

With the interference, or press fit deducted, you will now have the right diameter to bore the cylinder block. When boring the cylinder block, it is advisable to bore within .005 of finished size. Then sharpen the cutter and take the fine .005 finished cut. This will assure greater accuracy. Be sure to check the last cut for size before completing it, so as to be assured of the proper inside diameter to receive the sleeve.

★ ★ ★

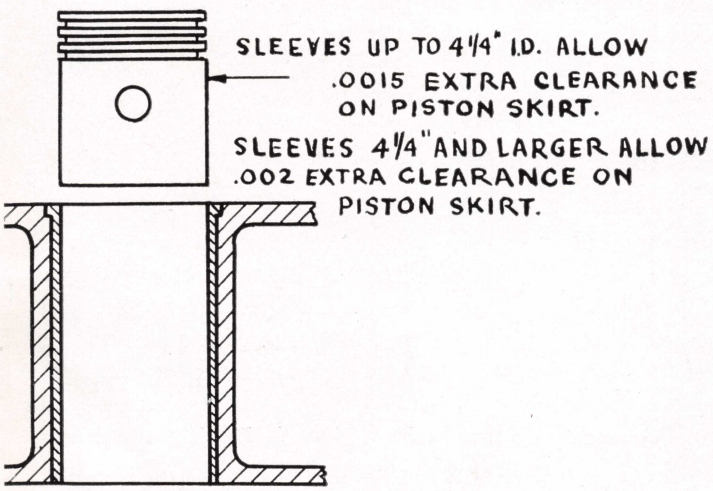
Nitricastiron Cylinder Sleeves (*Cont'd.*)

The proper procedure is to bore every other cylinder. When every other cylinder has been bored and ready to receive the sleeve, the sleeve should be coated with a light mixture of litharge and glycerin or permatex. Press in the sleeves with a hydraulic or screw press. If this is not available, we recommend the use of a long bolt through the center of the cylinder with a plate at the bottom and another at the top of the sleeve. This bolt should be threaded far enough to pull the sleeve into position. After every other sleeve in a six-cylinder engine is installed and finished, bore the remaining three cylinders and proceed as above.

As the majority of sleeves will have a ⅛″ flange at the upper end, it is advisable to bore the counterbore to receive this flange before removing the boring bar, after taking the finishing cut.

After all the sleeves have been pressed in position, it is now necessary to hone for size and finish. Upon measuring the cylinder wall you will find it to be approximately .001 under the standard bore size. We recommend that you use a 500 grit stone in a solid set hone. By the use of lard oil, the fuzz or growth from nitriding can be removed quite rapidly. Upon removing the fuzz and arriving at base metal, it will be quite difficult to remove any further material. IMPORTANT—It is absolutely essential that all fuzz is removed and no spots appear.

With Nitricastiron Sleeves Allow Extra Clearance on Pistons



Check each cylinder in an attempt to have them uniform in size as well as roundness. Now that you have the sleeves ready to receive the pistons, pins and rings, we caution you regarding the type of ring used and the piston clearances allowed. Do not attempt to fit pistons in Nitricastiron sleeves with the same clearances as used in conventional cylinder wall material, as the sleeve is so hard that little wear can occur. There will be little breaking-in period, and it is necessary to add .0015 more clearance than is customary to the piston in bores below 4¼″. From 4¼″ to 5″, add .0015 to .002 more clearance. WARNING—Under no circumstances use an anodized piston in a Nitricastiron sleeve.

With Nitricastiron Sleeves Use Expander Type Rings on Pistons

Piston rings should be as follows: 3-ring pistons should use the conventional type compression ring in the top groove, an expander type compression ring in the second groove, and an expander type oil ring in the third groove. A 4-ring piston should contain one conventional type compression ring in the upper groove, an expander type compression ring in the second and third grooves, and a regular type oil ring in the fourth groove. Where a piston calls for two oil rings, use but one expander type oil ring in the third groove, and an expander type compression ring in the groove above it. As the piston rings stay on the wall much more accurately in Nitricastiron sleeves than in conventional cylinder wall material, two expander type oil rings will dry up the upper part of the piston too severely.

If Thompson Nitricastiron sleeves are installed as outlined above and fitted with the suggested clearances, many more thousands of miles of ring life can be assured, as well as 200,000 to 400,000 miles of service from the sleeves themselves without having to be reconditioned.

★ ★ ★

Instructions for Installing Thompson Chrome Nickel Iron Alloy Wet Cylinder Sleeves

EXTENT OF GUARANTEE—READ—IMPORTANT!

We guarantee this sleeve assembly to be free from defects in material and workmanship, and held to the dimensions, tolerances and clearances of the original equipment sleeve. ALL CLAIMS FOR DEFECTS MUST BE MADE BEFORE INSTALLING THIS ASSEMBLY. If proper care is not exercised when sleeve is installed, it is possible to get it out of alignment and destroy the accuracy of the assembly. The piston, pin and rings supplied with each assembly are fitted to that particular assembly and must be installed in that assembly ONLY. This new sleeve should fit the case loose before the new rubber gasket is in place. The only pressure required to press sleeve in place is the pressure created by the rubber gasket. Read and follow directions CAREFULLY.

Remove cylinder head and oil pan of the engine, and pull the piston assemblies and connecting rods from the worn sleeves. Tap upward on the bottom of the old sleeve with a lead hammer or wooden mallet until the sleeve is loosened. It can then be pulled out.

Most wet sleeves use a rubber sealing gasket. Rubber gaskets should always be replaced when installing the new sleeves. We include a new rubber gasket with each sleeve. Where an asbestos gasket is employed with the original sleeve, it should be removed carefully and can usually be used for the new sleeve.

Gasket grooves should be thoroughly cleaned before the gasket for the new sleeve is inserted. After forcing the gasket in the cleaned groove, be sure it is smooth, without high spots or lumps.

Next, thoroughly clean the contact surfaces of the new sleeve and the engine block. Then coat liberally with white lead, hard oil, or some other good sealing compound.

Insert the new sleeve carefully, and press down gently to its proper seat.

When removing the pin from an **alloy** piston, for assembling to the connecting rod, first heat the piston in hot water. Do not force pin out of piston without heating, because piston will be distorted and is then apt to seize and score sleeve wall.

After re-assembling the engine, run in the new parts for several hours, using a light engine oil. In actual operation caution the driver to increase the load and speed gradually, enabling the new bearing surfaces to become adjusted to full load conditions, just as in the case of a new engine.

Instructions for Installing Thompson Centrif-I-Cast Dry Cylinder Sleeves

FINISHED SLEEVES

FOR THE 1/8" WALL SLEEVE (stock number Series SL-100F) it is only necessary to bore the cracked or deeply scored cylinder to two hundred and fifty thousandths (.250) larger than standard cylinder size.

FOR THE 3/32" WALL SLEEVE (stock number Series SL-600) bore the cylinder one hundred and eighty-seven thousandths (.187) larger than standard cylinder size.

Allowance for press fit has been made by the manufacturer. (Finished Sleeves often become out of round after O. D. grinding, therefore **don't** measure the Sleeve and then allow your own calculations for a press fit.) Cut the Sleeve to length and after heating the block to a running temperature (a blow-torch is satisfactory), press the Sleeve in place with the chamfered end to the lower end of the cylinder. The cylinder is then ready to be ground or bored to the desired size.

SEMI-FINISHED SLEEVES

Bore the cracked or deeply scored cylinder 1/4 inch larger in diameter than standard cylinder size; then turn the Sleeve to the proper size allowing **three thousandths (.003)** for a press fit on the outside. Cut the Sleeve to length and paint it with a mixture of litharge and glycerin on the outside, which acts as a seal. After heating the block to a running temperature (a blow-torch is satisfactory), press the Sleeve into place. The cylinder is then ready to be ground or bored to the desired size.

★ ★ ★

Causes of Piston Failure

I. **Collapse**—caused by:

(a) Insufficient clearance—always err on side of too much clearance.

(Fig. I)

II. **Seizure—Scoring.** (Figures I, II and III.)

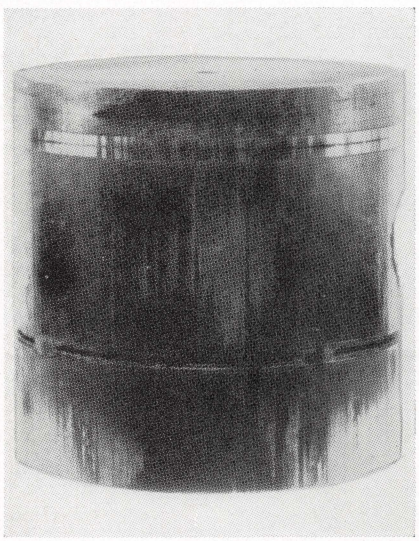
(a) Insufficient clearance and lack of lubrication.

(b) Cylinder head unevenly pulled down.

III. **Piston Slap.**

(a) Too much clearance; worn bore.

(b) Noises resembling slap; sloppy tappets and valves, loose piston pins, bent rods, loose bearings, cam shaft end play, worn cam.



(Fig. II)

IV. **Excessive Wear.**

(a) Insufficient oil; poor oil; dirty oil.

(b) Rough bore.

V. **Broken Pistons.** (Figures VII and VIII.)

(a) Insufficient land clearance.

(b) Insufficient ring gap or side clearance.

(c) Poor oil freezing rings in groove.

(d) Ring flutter, causing broken ring, causing broken piston.

(e) Detonation. (Figures IV and V.)

(f) Water in cylinder. (Figure VI.)

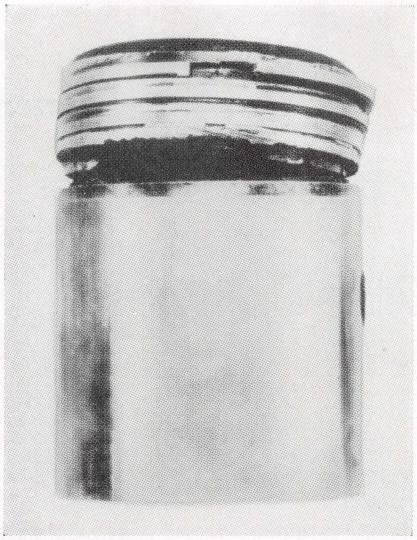
(Fig. III)

VI. **Acid Attack.** (Figure IX.)

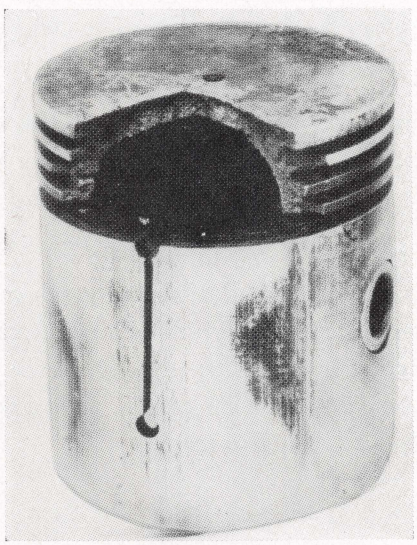
(a) Probably sulphur in the oil.

★ ★ ★

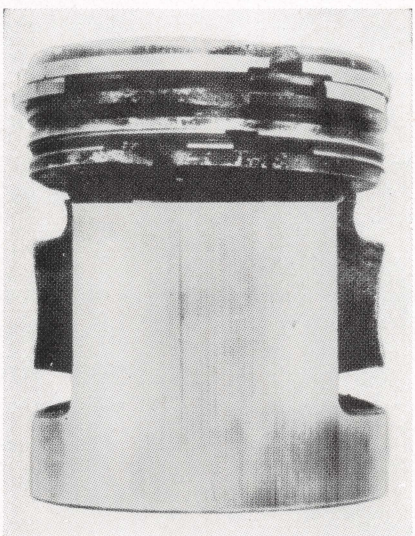
(Fig. IV)



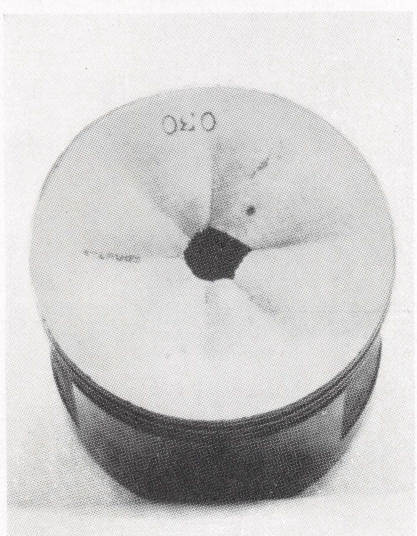
(Fig. VII)



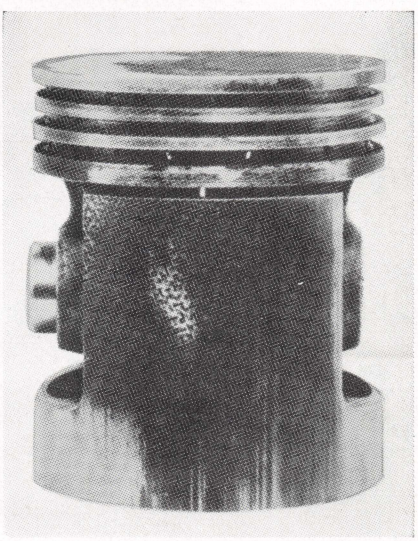
(Fig. V)



(Fig. VIII)



(Fig. VI)



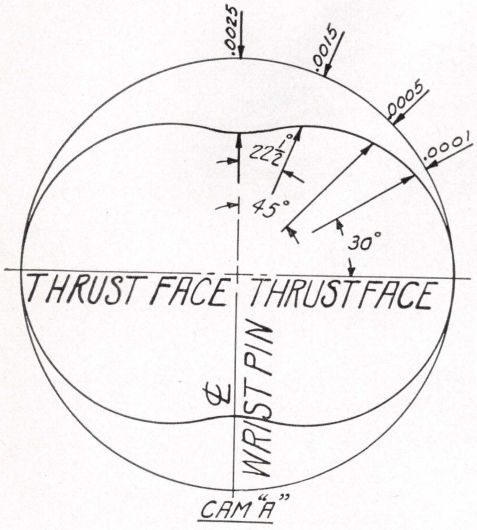
(Fig. IX)

★ ★ ★

Cam Grinding

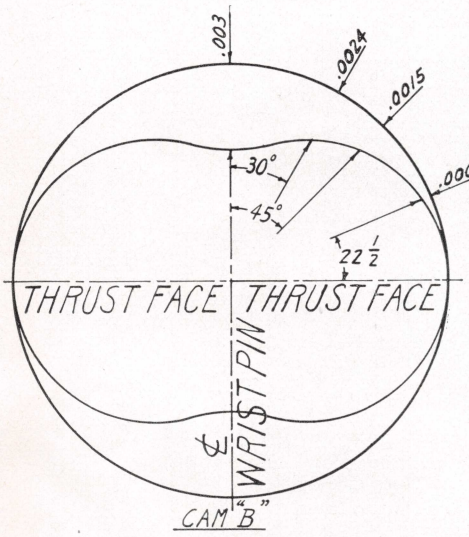
General Instructions for Cam Grinding Pistons

Most of the pistons developed during the last few years have been designed to be cam ground. With each new piston a new cam was developed until at the present time there are possibly 14 or 15 cams used by the various original equipment manufacturers. The presence of the numerous cams presented a difficult service problem. In order to clear up this condition the various piston manufacturers first designed four standard cams to cover all of the pistons on the market. The development of the auto thermic required the addition of a new cam, so at the present time we have 5 standard cams known as "A", "B", "C", "D" and "E".



CAM "A"

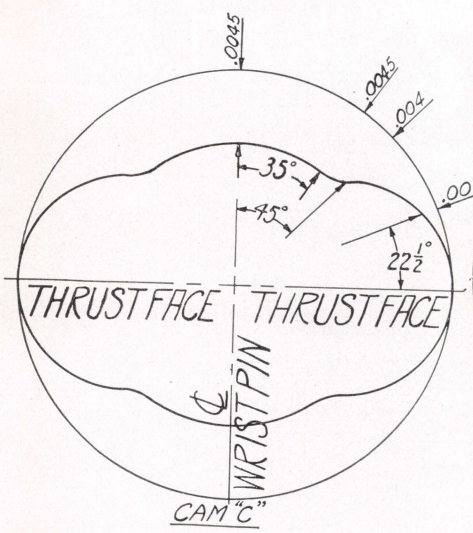
If you will glance at the contours at the left you will note that there are 4 distinct contours—A, B, C and D. The contour on Cam E is similar to Cam B with .013 drop across the pin bosses instead of .006.



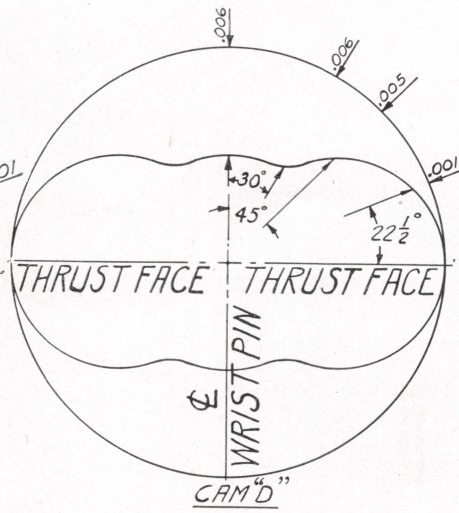
CAM "B"

With these 5 cams available any piston in the automobile field, either iron or aluminum, may be cam ground at the user's request. For best results in cam grinding follow the individual instructions packed with each set of pistons.

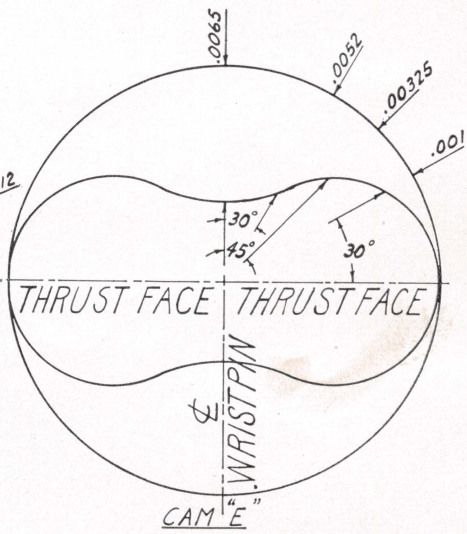
Cam grinding is a delicate operation and much care should be exercised. In the first place, be absolutely sure that the cam used has the proper shape. Secondly, be sure that the cam grinder is in good condition so it will reproduce the contour on the piston. It is a good policy to check the contour on pistons at regular intervals.



CAM "C"



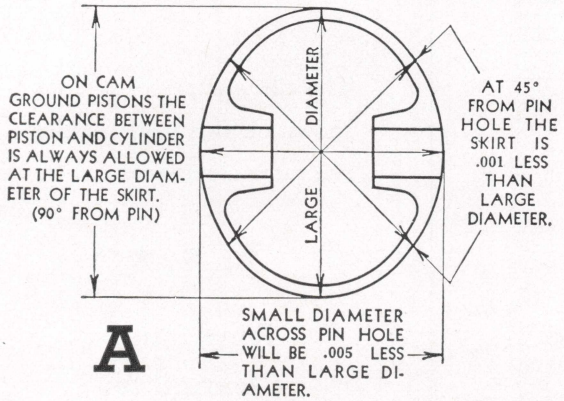
CAM "D"



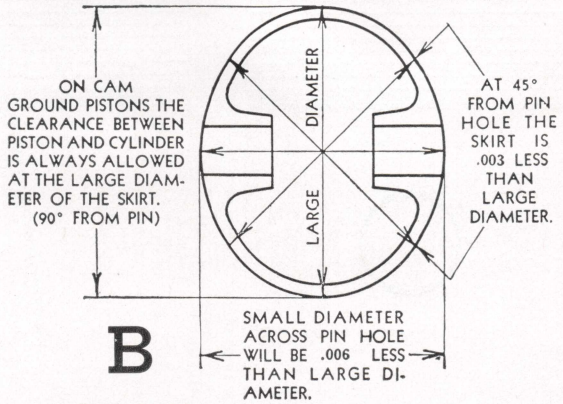
CAM "E"

★ ★ ★

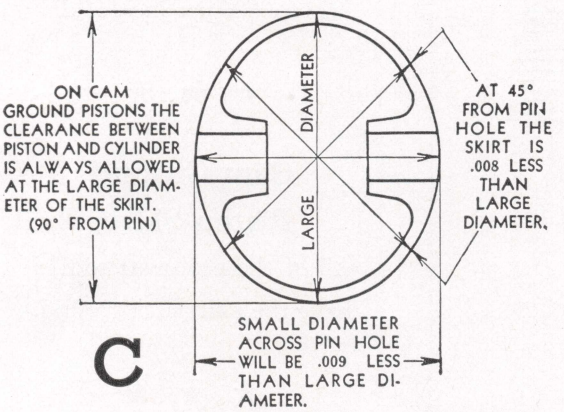
Standard Cams



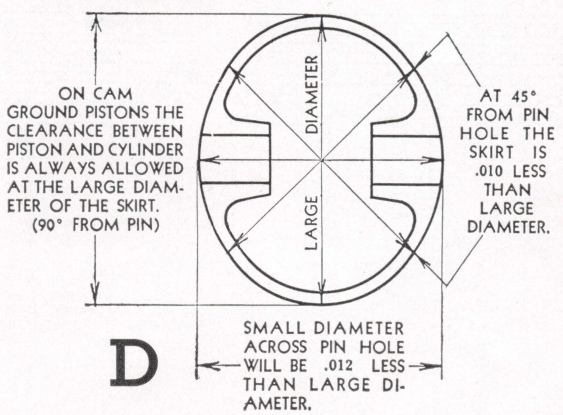
Cam "A" is for Chevrolet and all other CAST IRON pistons up to 5″ diameter. Diameter drop at the bosses .005″. Clearances at the larger diameter should be .0015″ to .0025″. 45° diameter drop .001″ from thrust face diameter.



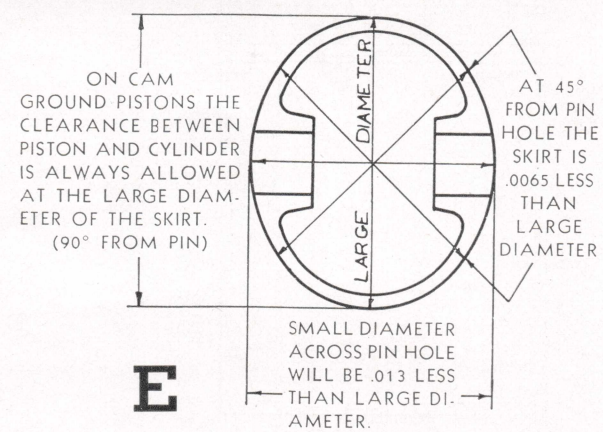
Cam "B" is for any wide or narrow strut, Nelson Patent Piston, when cam grinding is desired. This cam is also suitable for all aluminum pistons with complete vertical skirt slots. Diameter drop at bosses .006″. Clearances per manufacturers' recommendations. 45° diameter drop .003″ from thrust face diameter.



Cam "C" is for all T-slot, all aluminum, flexible skirt pistons. T-slot pistons MUST be cam ground. Diameter drop at bosses .009″. Used on pistons 2½″ to 3½″ in diameter. Recommended clearances .0004″ per inch of diameter minimum to .0005″ per inch maximum across the thrust diameter. 45° diameter drop .008″ from thrust face diameter.



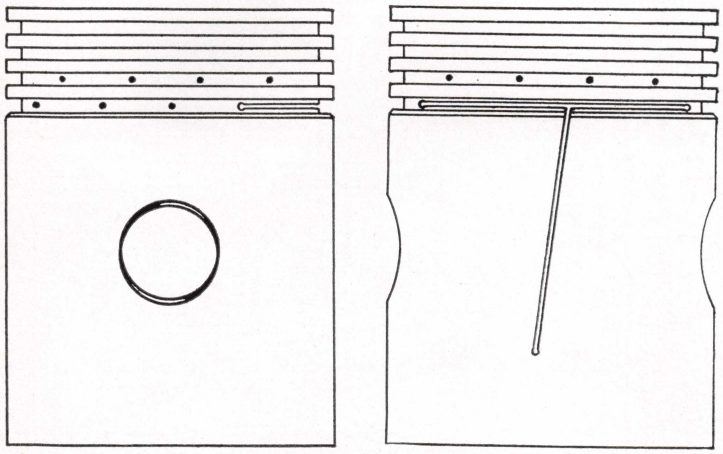
Cam "D" is for all T-slot, all aluminum, flexible skirt pistons from $3\frac{9}{16}$″ to 5″ diameter. Diameter drop at bosses .012″. Recommended clearances .0006″ per inch of diameter minimum to .0007″ per inch of diameter maximum across the thrust faces. 45° diameter drop .010″ from thrust face diameter.



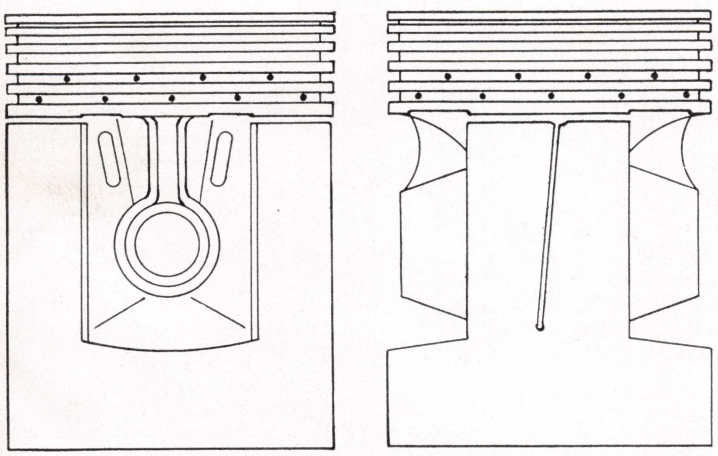
(See Comments in Second Paragraph, Page 40)

★ ★ ★

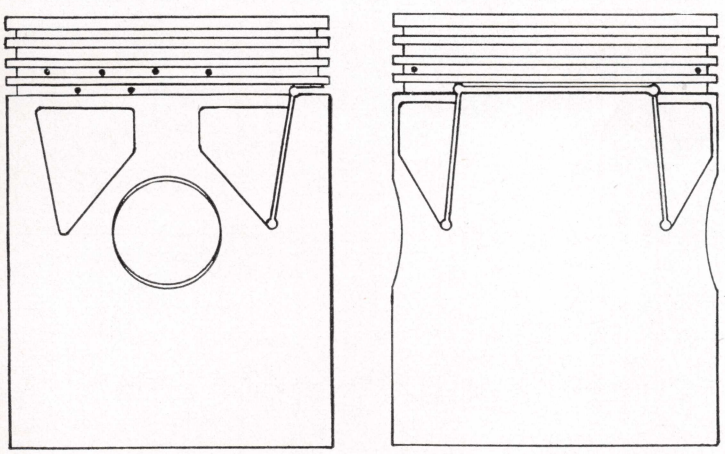
T-Slot Pistons



T-Slot Pistons
(With Box Relief)



U-Slot Pistons



The three types of pistons shown on this page require the same clearances.

★ ★ ★

Ring Land Clearances:

1st land—
.007 to .008 per inch of dia.
2nd, 3rd, 4th land—
.005 to .006 per inch of dia.

★ ★ ★

Cam Ground Piston Skirt:

All of these pistons should have the skirt cam ground.

★ ★ ★

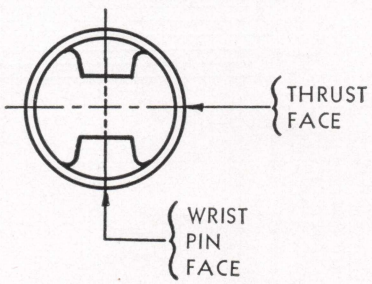
For cam contour and clearances, see chart on page at right.

★ ★ ★

Clearances and Cam Specifications for T-Slot and U-Slot Pistons

(See Page Opposite)

Location of Thrust and Wrist Pin Faces



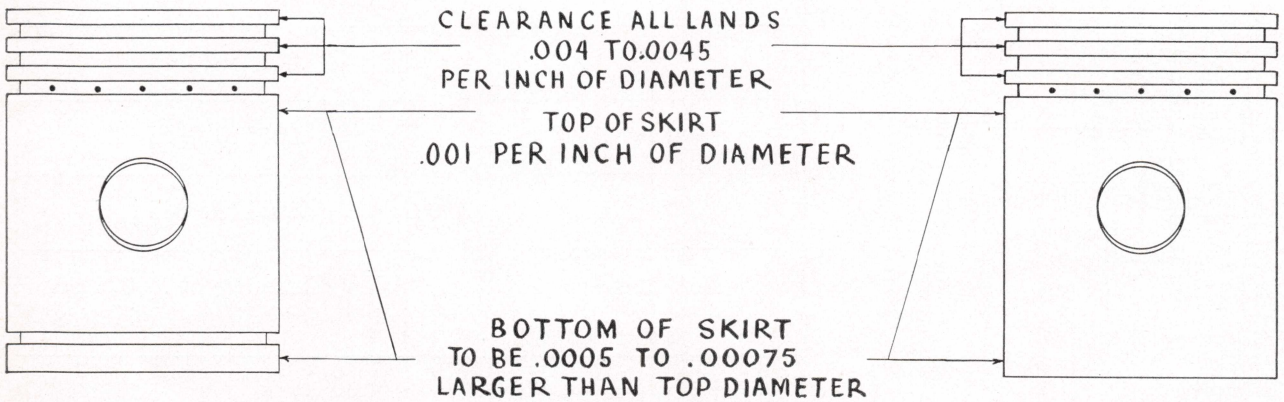
Cylinder Bore Diameter	*Clearance Across Thrust Faces*
$2\frac{3}{4}''$ to $3\frac{5}{16}''$	.001 to .0015
$3\frac{3}{8}''$ to $3\frac{7}{8}''$	.0015 to .0025
$4''$ to $4\frac{7}{8}''$	.0025 to .0035
$5''$ and larger	Allow Clearance of .00075 per inch of Cylinder Diameter

Cams To Be Used

Piston Number	*Cam*	*Piston Number*	*Cam*	*Piston Number*	*Cam*
L-474	D	L-547	C	L-577	C
L-484	C	L-548	C	L-597	C
L-516	C	L-549	C	L-601	B
L-517	C	L-550	B	L-607	C
L-524	C	L-552	C	L-608	C
L-526	C	L-553	D	L-612	C
L-527	C	L-557	C	L-613	C
L-530	C	L-564	C	L-614	C
L-531	C	L-565	C	L-615	C
L-533	D	L-566	C	L-616	C
L-534	C	L-567	C	L-617	D
L-536	D	L-572	C	L-618	D
L-541	C	L-573	C	L-623	C
L-542	C	L-574	C	L-650	B
L-543	C	L-575	C	L-651	B
L-546	C			L-700	C

★ ★ ★

General Instructions and Clearances for Cast Iron Pistons



Pistons with Offset Pins or Slotted Skirts should be installed so that the Arrow ➳(Front) stamped on the head—points toward the front of the car.

Tin Plating

After grinding cast iron pistons to the regular clearance, it is advisable to TIN PLATE them. The plating can take up one half of the customary clearance, reducing cold slap and danger of scuffing.

Cam Grinding

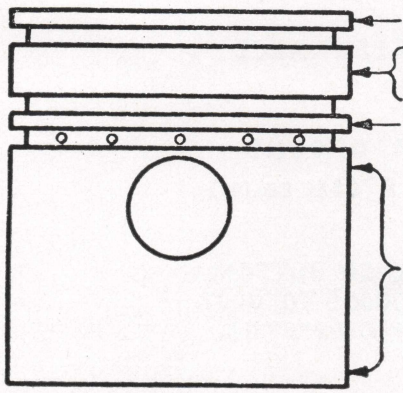
For additional protection against seizure all cast iron pistons may be cam ground. Use Standard Cam "A"—see Page 40. Use clearances as specified above.

★ ★ ★

Clearance Chart for Cast Iron Pistons

The following Cast Iron piston numbers require special land and skirt clearance

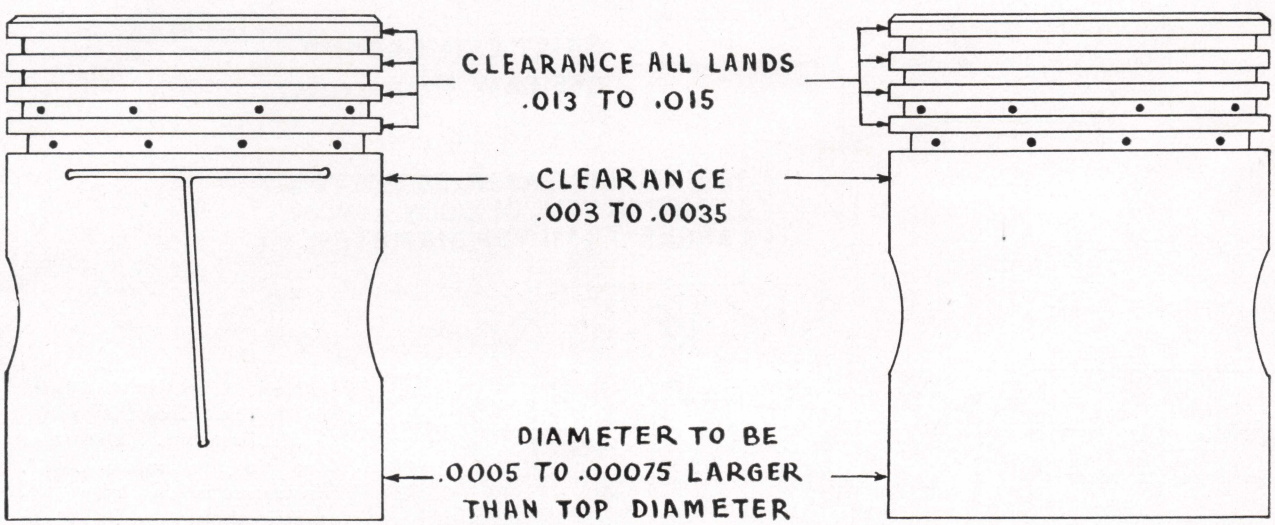
PISTON STOCK NUMBERS:	C-8	C-673	C-646	C-241
TOP LAND	.017	.017	.018	.018
SPECIAL LAND	.012	.012	.013	.013
3RD LAND	.007	.007	.008	.008
SKIRT	.0035	.0035	.005	.004



Pistons for White 8A Engine

C-873
T-SLOT PISTON

C-836
PLAIN PISTON

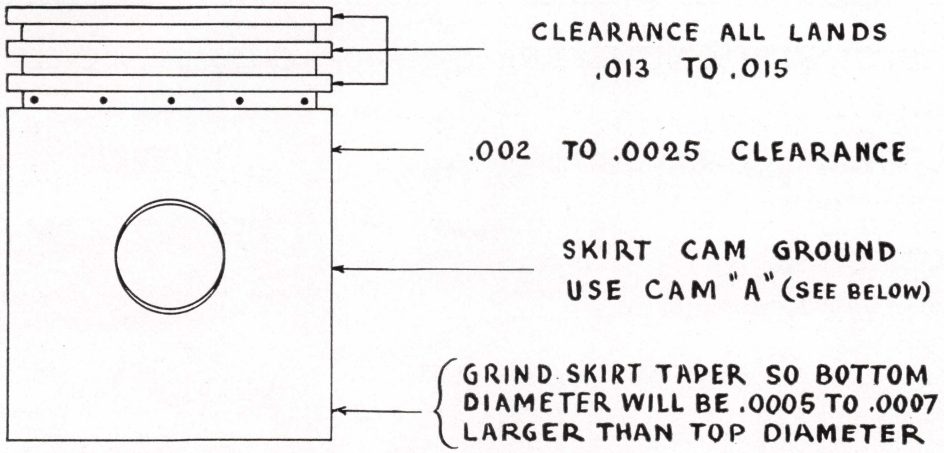


Note: There is no standard bore for these pistons. Always measure bore and specify diameter when ordering.

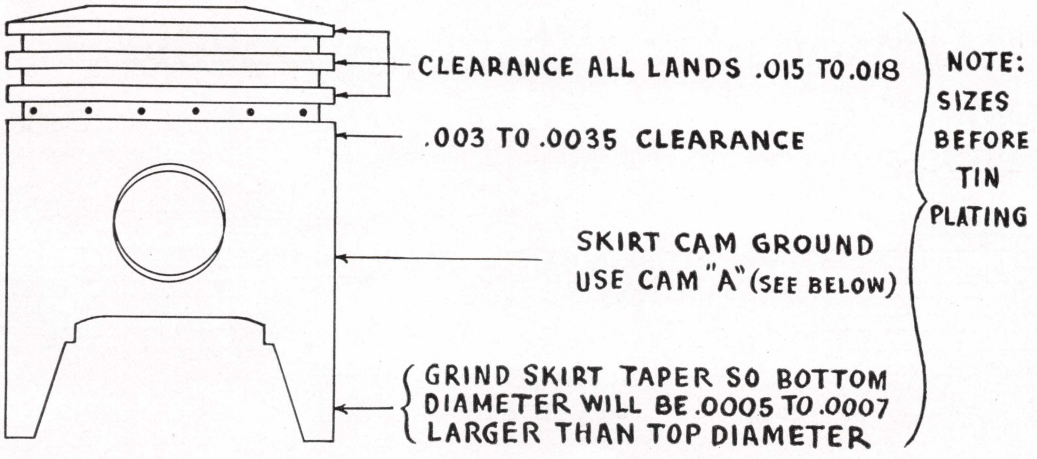
★ ★ ★

Clearance Chart for Cast Iron Pistons (*Cont'd.*)

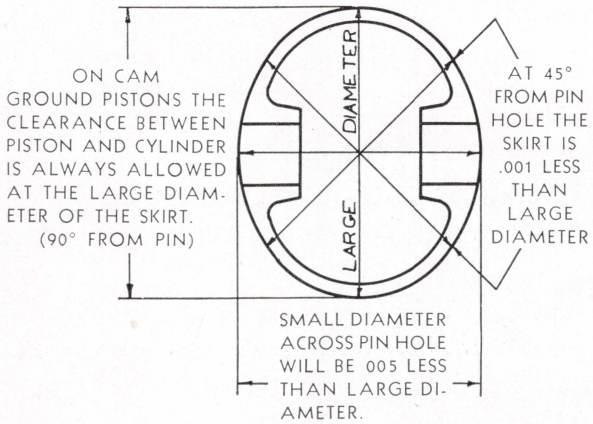
Special for C-850, C-800, C-700



Special for C-974



Note: Pistons finished at factory carry stock No. C-975



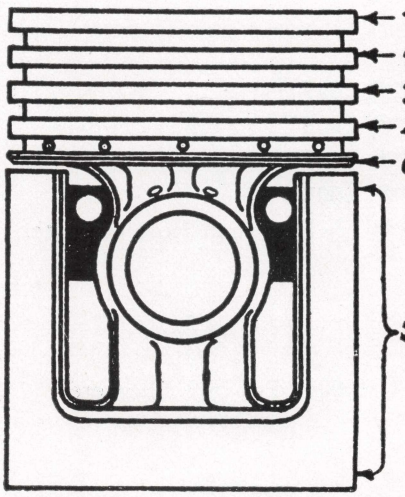
CAM CONTOUR "A"

Cam "A" is for Chevrolet and all other Cast Iron Pistons up to 5″ diameter. Diameter drop at the bosses, .005″. Clearances at the larger diameter should be .0015″ to .0025″. 45° diameter drop .001″ from thrust face diameter.

★ ★ ★

Clearance Chart for Narrow Invar Strut Types

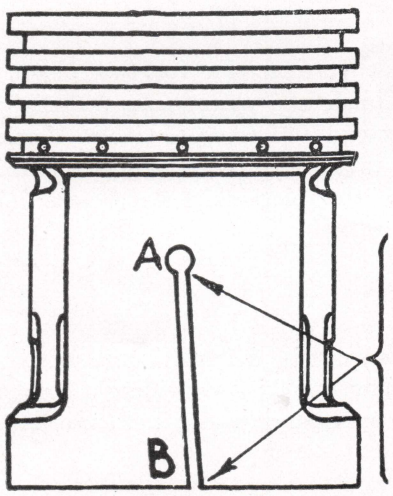
(Do Not Confuse This Type With Broad Invar Strut)



Per inch diameter.

When finishing these pistons to size, grind the skirt straight as usual, using the extreme upper end of the skirt as a place to determine the diameter measurement. The piston is designed to go slightly out-of-round at the bottom of the skirt when removed from grinding machine centers. The diameter parallel to the pin hole will be slightly less than the diameter at 90 degrees to the pin hole.

★ ★ ★

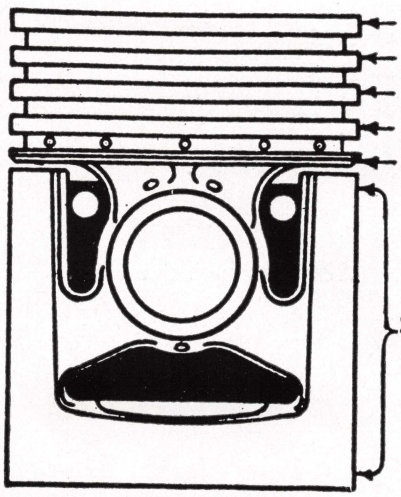


NOTE:—The correct skirt slot for these pistons is shown at left. After finishing piston remove metal tack at "B". The skirt remains solid above "A".

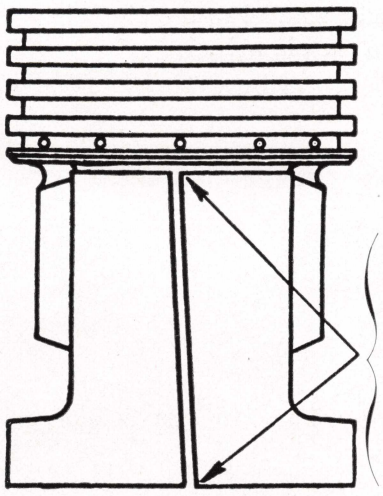
★ ★ ★

Clearance Chart for Broad Invar Strut Types

(Do Not Confuse This Type With Narrow Invar Strut)



Per inch diameter



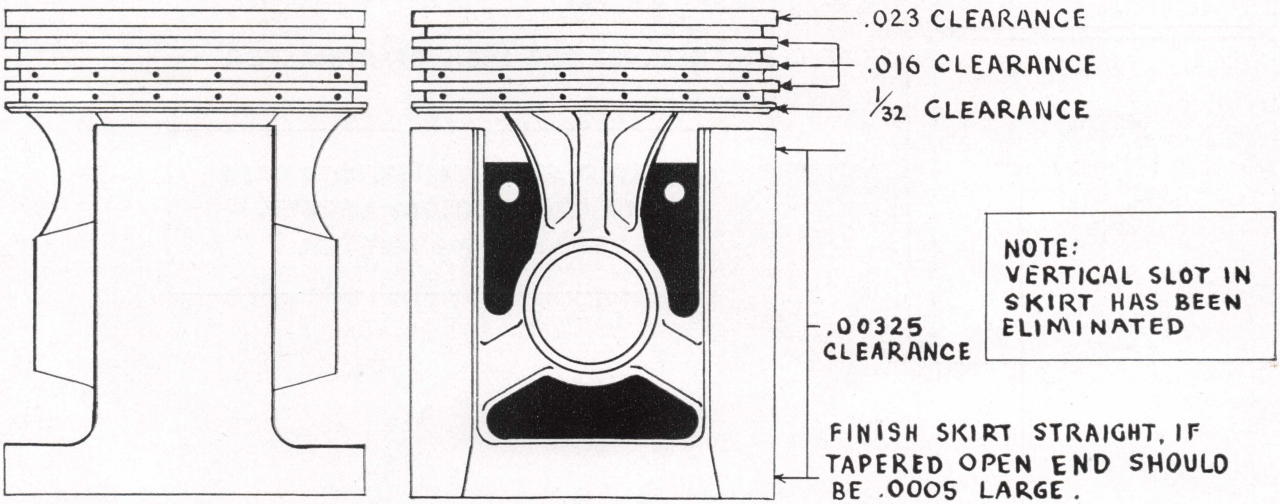
Note:—The correct vertical slot for this piston is shown at left. Finish the skirt diameter slightly taper with the open end .001 to .0015 small. Vertical slot in this piston must be finished top and bottom before installation. Complete skirt slot before finish grinding.

They are designed so that the semi-finished pistons can be finished in the usual manner on cone centers without danger of spreading the skirt, providing a light tail stock pressure is used. Never use any more pressure on the tail stock than is necessary to hold the piston.

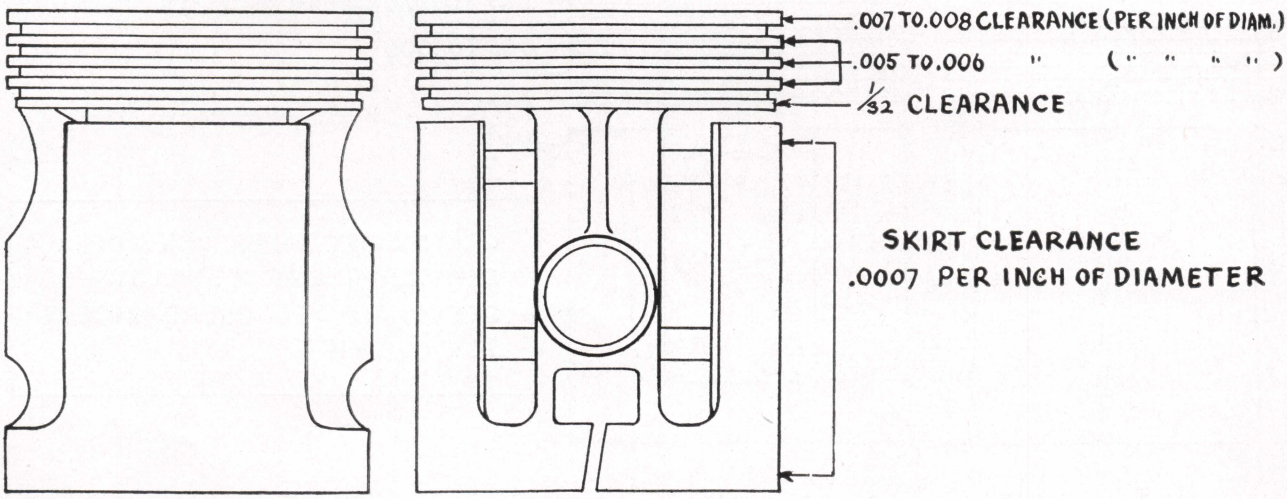
★ ★ ★

Clearance Chart for Strut Type Pistons (*Cont'd.*)

Special Broad Invar Strut (Solid Skirt) L-595



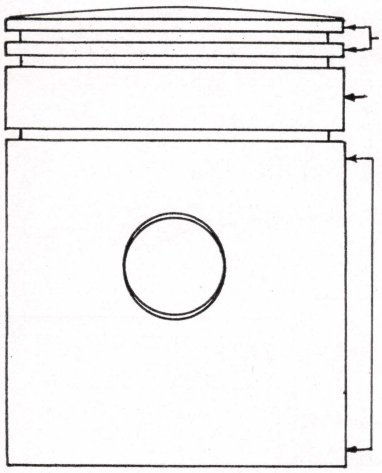
Double Invar Strut Pistons



Finish Skirt Diameter Straight. Taper, if any, with open end large. The slots in this piston are completed at the factory.

★ ★ ★

Clearances for Aluminum Alloy Pistons Solid Skirt or Trunk Type



CLEARANCE .006 TO .007 PER INCH OF DIAMETER

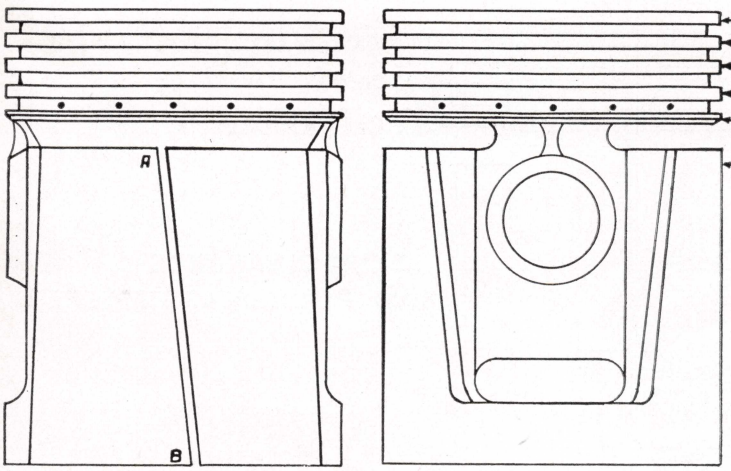
" 003 TO .004 " " " "

SKIRT CLEARANCE .002 PER INCH OF DIAMETER

GRIND SKIRT TAPER WITH OPEN END .0005 TO .001 LARGER THAN TOP DIAMETER

★ ★ ★

Alloy Split Skirt Pistons



.007 TO .008 CLEARANCE (PER INCH OF DIAM)

.005 TO .006 " (" " " ")

.010 " (" " " ")

.00075 " (" " " ")

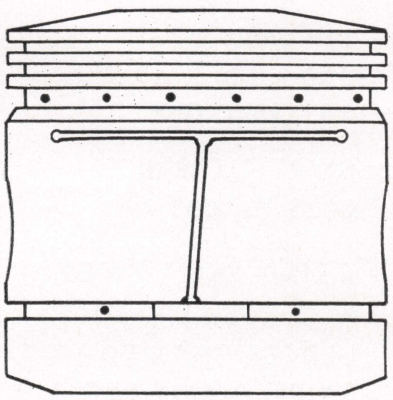
GRIND SKIRT TAPER WITH OPEN END .0005 LARGE. ALLOW RECOMMENDED CLEARANCE AT TOP OF SKIRT.

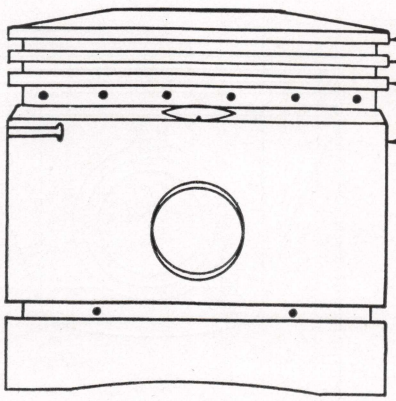
Note: This type of piston must have Vertical Skirt Slot completely open, top to bottom. After finishing piston to size, remove metal tacks at A and B.

★ ★ ★

Clearance Chart Aluminum Alloy Pistons (*Cont'd.*)

Special Heavy Duty Ford V-8 Pistons—L-700





TOP LAND .023 CLEARANCE
2ND & 3RD. LAND .016 CLEARANCE

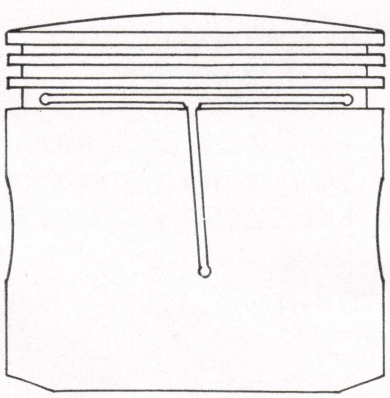
SKIRT .002 CLEARANCE

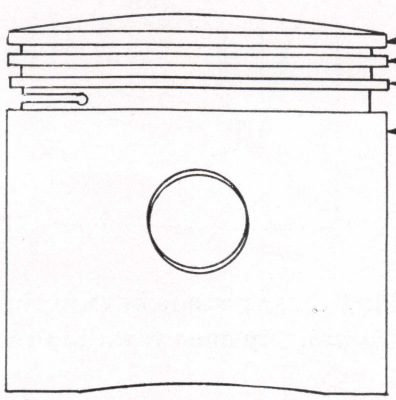
SKIRT CAM GROUND
USE CAM "C"

GRIND SKIRT TAPER WITH
OPEN END .0005 LARGE

★ ★ ★

Special Clearances Ford 60 H. P.—L-651





TOP LAND .019 CLEARANCE
2 ND & 3RD LAND .013 CLEARANCE

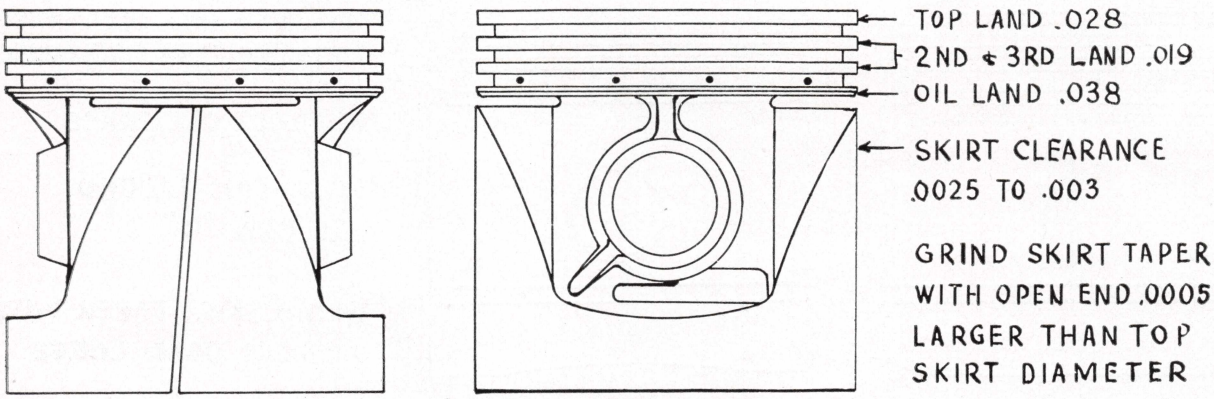
SKIRT - .0015 CLEARANCE

SKIRT CAM GROUND
USE CAM "B"

★ ★ ★

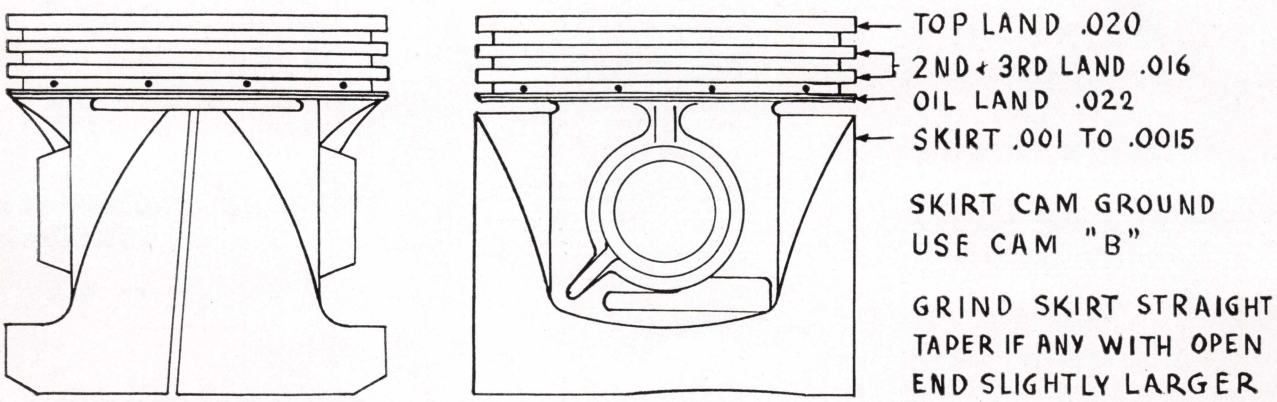
Clearance Chart Aluminum Alloy Pistons (*Cont'd.*)

Special Clearance Ford Piston L-400



Before installing these pistons be sure that the Vertical Slot is completely open from top to bottom

Clearance for Ford V-8 L-550 and L-650



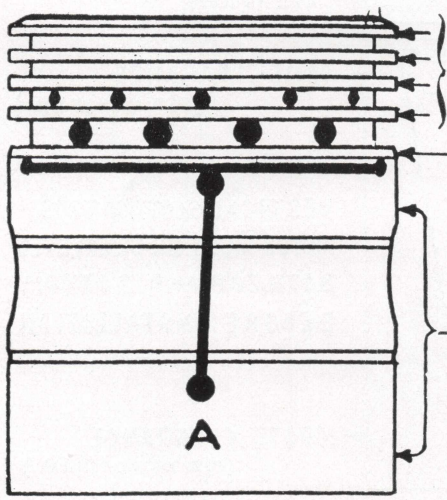
Before installing these pistons be sure that the Vertical Slot is completely open from top to bottom

Note: Piston shown is **L-550.** Piston **L-650** is the same with the Dome Head.

★ ★ ★

Clearance Chart for Hudson-Terraplane Pistons

L-484, L-516, L-517



.016

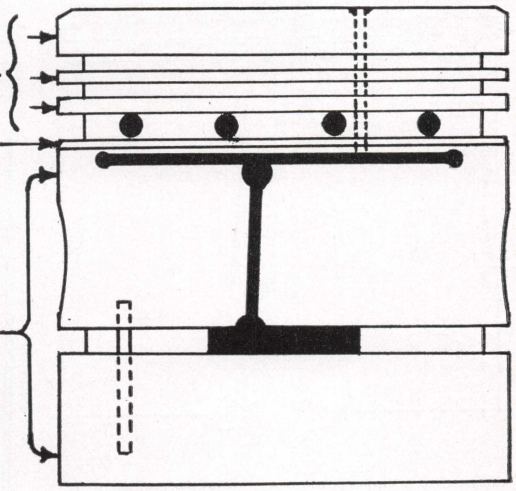
Chamfer $\frac{3}{32}$ x .010

.001
Clearance

Skirt Cam Ground
Cam "C"

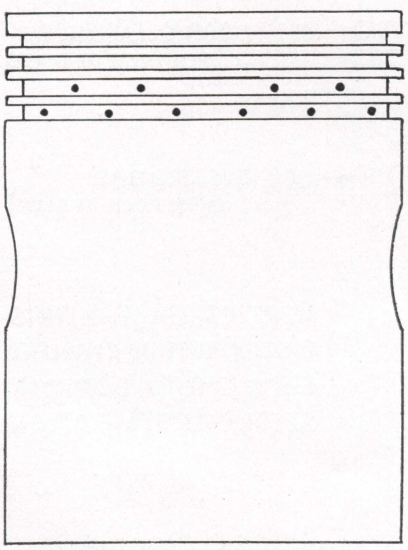
Grind Skirt taper
with open end
.0005 large

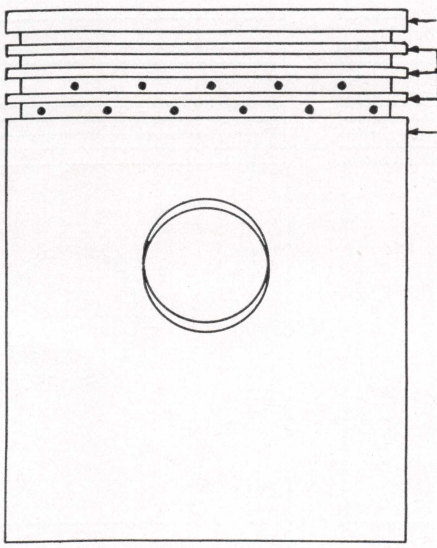
L-552



Special Solid Skirt Piston L-623

For 3⅜ Diam. Bore Dodge Trucks





.025 CLEARANCE

.018 CLEARANCE

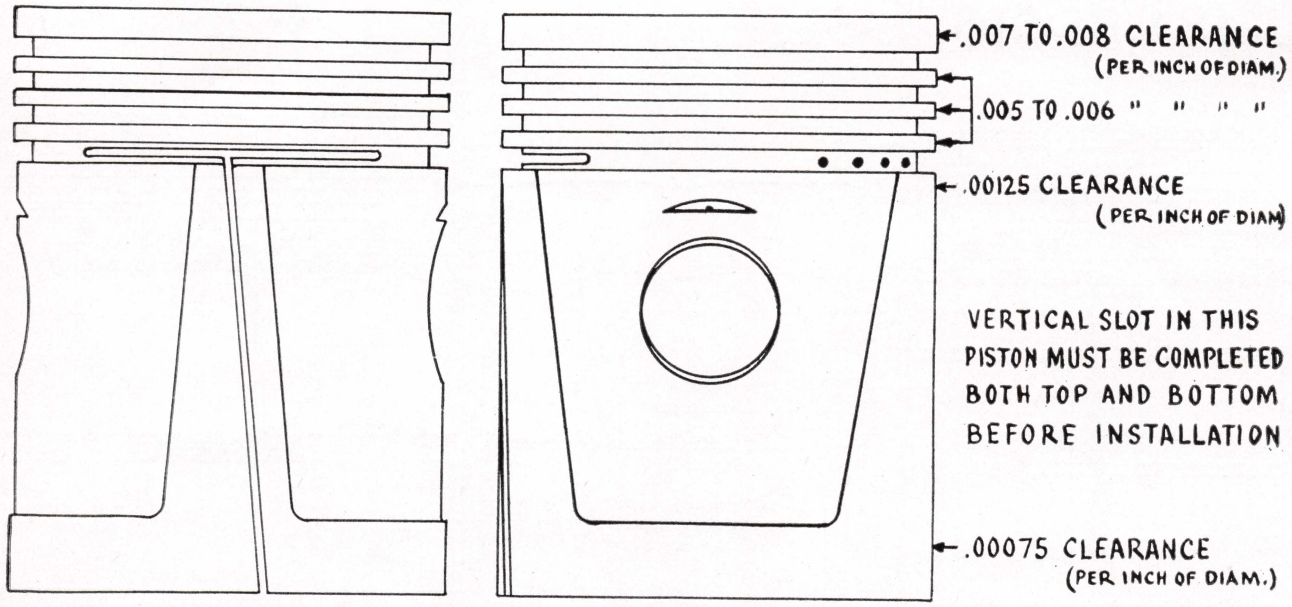
.005 CLEARANCE

SKIRT CAM GROUND
USE CAM "C"

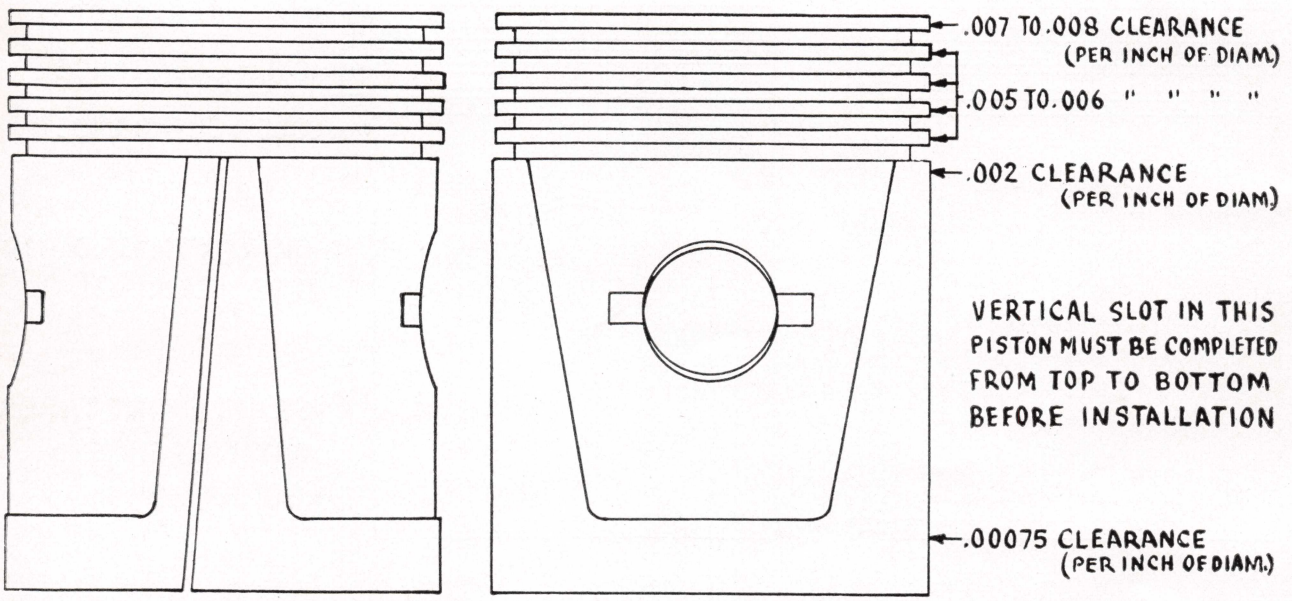
GRIND SKIRT TAPER
WITH OPEN END
.001 LARGE

★ ★ ★

Aerotype Pistons



Special Aerotype Pistons
L-304, L-305, L-490, L-501, L-502

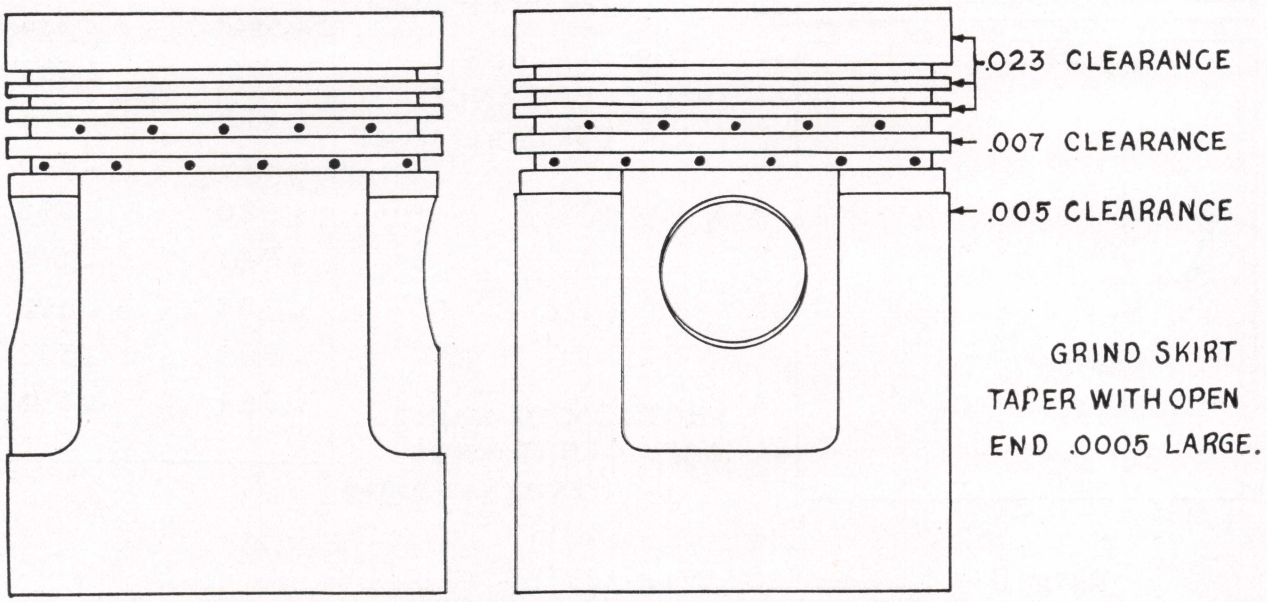


★ ★ ★

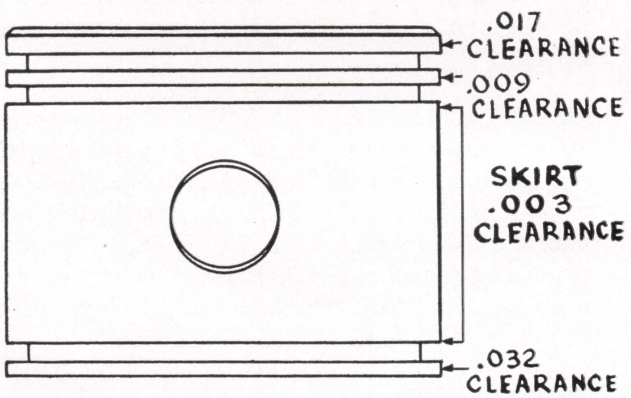
Clearance Chart Aluminum Alloy Pistons (*Cont'd.*)

Special Solid Skirt Piston L-503

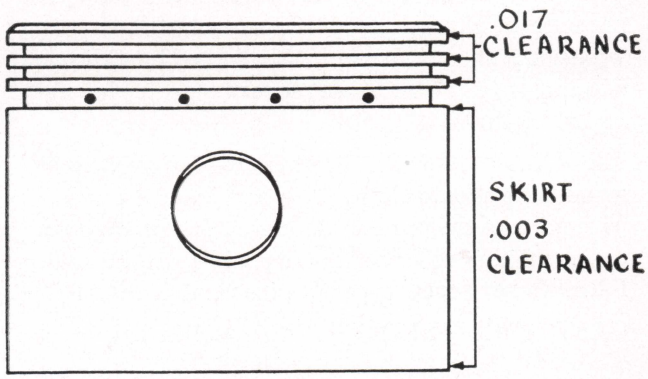
MACK MODEL BG



AMERICAN AUSTIN
PISTON No. L-480



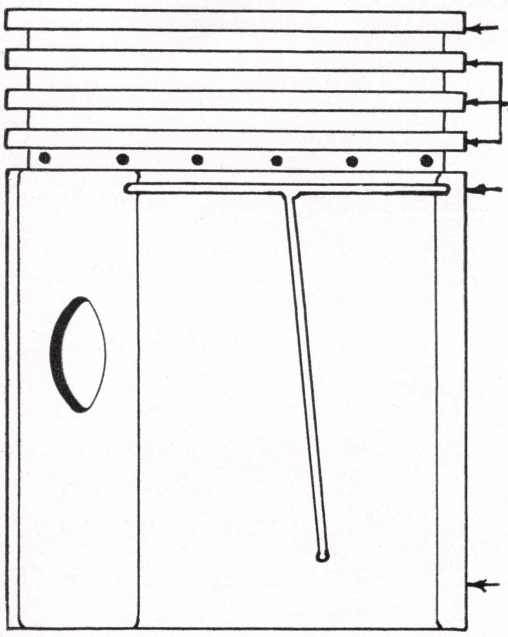
AMERICAN AUSTIN
PISTON No. L-532



★ ★ ★

Clearance Chart Aluminum Alloy Pistons (*Cont'd.*)

T-Slot Pistons with Milled Relief for Round Grinding



PISTON NOS.	
L 541	L 585
L 546	L 586
L 576	L 587
L 578	L 588
L 579	L 589
L 580	L 590
L 581	L 591
L 582	L 592
L 583	L 593
L 584	L 594

Note: Pistons are stocked with milled relief across the bosses for shops that are not equipped with cam attachment. Round grinding is NOT RECOMMENDED for a cam ground type of piston, as the factory-type pistons are cam ground.

Piston Pin Fitting

CHEXPAN ALLOY PISTONS—Fit pins in **oscillating** types so they can be inserted by slight pressure of thumb at 70° Fahr. In **full-floating** types fit pins so they can just be forced in with palm of hand at 70° Fahr. In **set screw** type fit pins tight at 160° Fahr.

REGULAR ALLOY PISTONS—In **oscillating** types pins should fit so they can just be forced in with palm of the hand at 70° Fahr. In **full-floating** types fit pins so light tapping will force in at 70° Fahr. In **set screw** types fit pins tight at 160° Fahr.

CAST IRON PISTONS—In **oscillating** types (BUSHED) insert pin by slight pressure of finger. In oscillating types (NOT BUSHED) fit so pin will fall through of its own weight. In **set screw** types fit tight.

DIAMOND BORED PISTONS—Pins stamped "For diamond bored pistons" will fit properly without reaming. In **full-floating** types use light tap or palm push-fit at 70° Fahr. In **oscillating** type pins use thumb push fit at 70° Fahr. In **bushed type iron pistons,** pin should slide out by its own weight. IN ALL CASES HAVE PIN AND PISTON AT SAME TEMPERATURE.

↓ **CAUTION** ↓

IF PINS ARE FITTED AT FACTORY BE SURE TO ASSEMBLE SAME PIN IN EACH PISTON AS RECEIVED.

★ ★ ★

Tin Plated Pistons

The advantages of tin plating are as follows:

Because of tin's low co-efficient of friction, tin-plating practically eliminates piston seizing and slapping during the break-in period and permits you to fit your pistons to one-half the clearance usually allowed and makes it possible for the driver to immediately take the engine out on the road and highball on the accelerator without any danger of seizure. This is particularly true on trucks and large motors and has a very definite appeal to fleet operators.

Tin-plated pistons, in addition to cutting down blow-by, improve oil consumption and power output. It has been found that tin plating the piston rings of prolific oil pumpers helps considerably.

Tin-plating of rocker arm lifters is considerable help in quieting over-head valve engines. All cast iron pistons that are re-fitted with new pins or rings should also be plated to eliminate slap. Some jobbers tin-plate the clutch housing on their re-built clutch jobs, so as to make them look different, giving them a merchandising advantage over their competitors. Other uses are tin-plating hydraulic brake cylinders, refrigerator coils and trays, copper tubing and air compressor pistons.

Alcoted Pistons

Alcoting is a delicate electro-chemical treatment of special alloy pistons which hardens the outside surface of the metal to resist wear and give them longer life. This treatment also produces a wearing surface which has high oil absorbing qualities, holding the oil film between the pistons and the cylinder wall, and assuring lubrication when the engine is warming up.

The process also hardens the ring grooves and pin holes, providing maximum wear resistance to these bearing surfaces.

If you fit the pins, the sizing of the hole will usually require honing, as many cutting tools or reamers will not touch the hard surface.

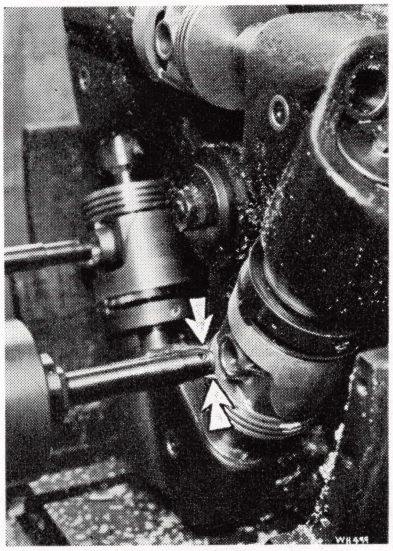
If the pins are fitted before the pistons are Alcoted it will be found that the pin holes have decreased .0004 in diameter. To get the correct pin fit we recommend the following in the order named:

1. Refit the pins by honing the holes to size.
2. Refit the pins with .0004 greater clearance before Alcoting.
3. Plug the holes with soft rubber plugs to prevent Alcoting the pin hole. We do not favor this third method.

Hardened alloy pistons of this type are furnished by Thompson Products, under the trade name "Alcoted Pistons."

★ ★ ★

Diamond-bored Pistons



The arrows point to the two diamonds in the roughing shank of a diamond boring machine at the Thompson Piston Plant. The finishing shank in the background has but one stone. The shanks turn 3,600 r. p. m. as compared with 40 to 180 r. p. m. of the old reaming method. The finishing cut in the pin hole removes only .0016 (16-10,000) of metal.

★ ★ ★

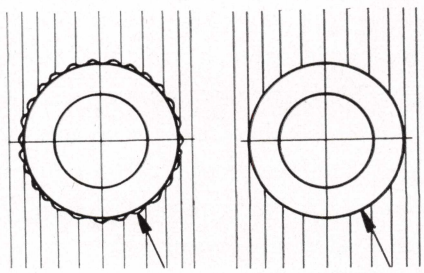
Probably the best way to explain the advantages of diamond bored pistons is to review the problems encountered in finishing the pin holes by the old method of drilling, boring and reaming. The cutting action of drills, reamers and boring tools is harsh and requires considerable pressure and power. This means the piston must be held rigidly during these operations, and for this reason it is impossible to hold pistons on the delicate centers in the closed end of the skirt. It is therefore very difficult to produce an accurate alignment of the two pin holes, one with the other, and it is also practically impossible to make the pin holes square with the piston side wall. With diamond boring the piston can be held lightly on its centers and the hole bored to very accurate limits for alignment and squareness.

Also, it is possible to hold the pin hole diameters much more closely by the diamond process than by the old reaming method because diamond boring takes only very light cuts at very high speed, whereas reaming takes heavy cuts at slow speeds.

With the old process it was difficult to produce a round hole because of the inherent tendencies of the tools to vibrate and chatter. This produces a hole with "high and low spots" forming only a partial bearing surface around the diameter of the piston pin.

With the diamond process the very manner the hole is produced permits a truly round hole with a very high degree of surface finish, eliminating high spots and providing as near to a 100% bearing surface as is obtainable. Naturally the joint of the piston and pin remains longer in its original close-fitted condition. In the case of the reamed piston, the high spots soon wear down, quickly increasing the clearance between piston and pin.

Thompson Products for these reasons has been changing over as rapidly as practicable to the manufacture of diamond-bored pistons, both alloy and cast iron. Many of these, in boxes stamped "Diamond-bored," are already on the jobbers' shelves. Diamond-bored pin holes are now standard in all alloy and bronze-bushed cast iron pistons.



Left: Exaggerated sketch of "high spots" around pin in reamed piston; diamond boring (right) eliminates these "hills and valleys" and gives an improved bearing surface.

Piston pins, sized for diamond bored pistons in matched sets, will require no fitting. A perfect fit of the piston and pin is automatically assured.

★ ★ ★

"It's a shame to put a beautiful finish on a piston and then deliver it to a customer wrapped in old newspaper or manila"

Many jobbers agree, for they have taken out over 300,000 of our piston wrappers, as illustrated. These wrappers are a special paper stock with plenty of bulk to protect the piston. They prevent cracking or nicking of the ring lands and the picking up of dirt or abrasives in the pin holes, which may cause trouble later on. They're good advertising, with your imprint large, and they impress the fact that your machine shop does accurate, careful work. We supply these wrappers, imprinted, for $3.50 a thousand, which is less than our actual large-quantity cost. Jobbers using them may also buy the handy wire brushes shown in the picture, for cleaning rings grooves, etc. The brushes fit almost any bench grinder. They are 6 inches in diameter, with a ½-inch hole. We supply them at 35c each, minimum quantity six—but only to jobbers ordering wrappers. Our advertising department will be glad to send you a sample wrapper before you order.

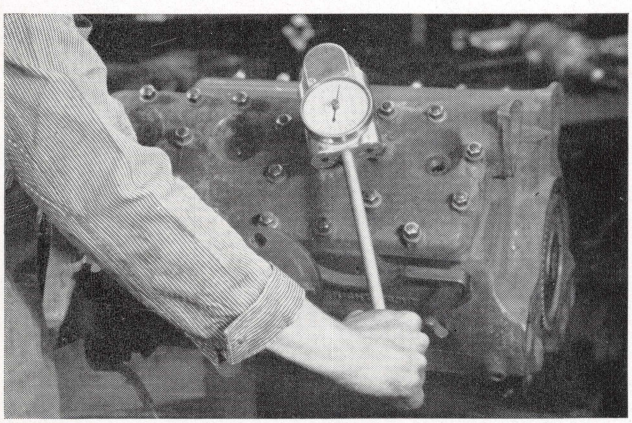
★ ★ ★

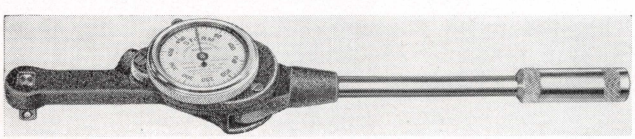
How to Install Cylinder Heads

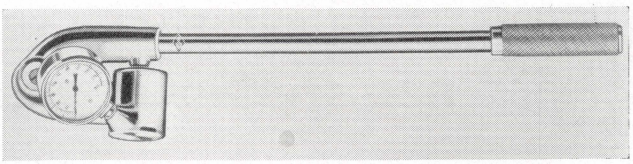
Many a perfect job of installing valves, pistons, pins, rings, etc., or reboring cylinders, is ruined by **uneven** tension, or **improper** tension, given to the stud bolts when the cylinder is put back into place. Just a quarter **more** turn on any one stud draws the block and face of the head together 12½ thousandths **closer** than at other points. This can seriously distort the block and head, throw the reciprocating cylinder parts out of line, and change their original correct clearances. Loss of compression and power, piston seizure, oil and gas waste, and difficulty in re-tuning the engine follow. It is not safe to rely on the "feel" of an ordinary wrench as a means of tightening down the studs uniformly. One thing that makes guess-work of this method is that the studs, stud nuts and stud holes themselves can vary greatly on any engine.

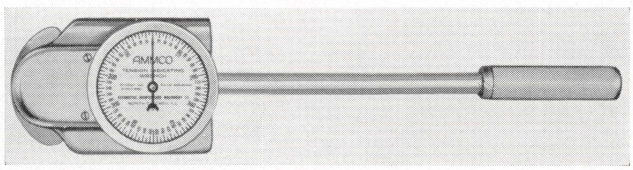
Tension Indicating Wrenches

Several reputable manufacturers now offer special tension wrenches, equipped with indicating dials, that can be set to tighten all studs in a cylinder head to a **predetermined** and **uniform** tension. Three of these tension indicating wrenches are here illustrated:







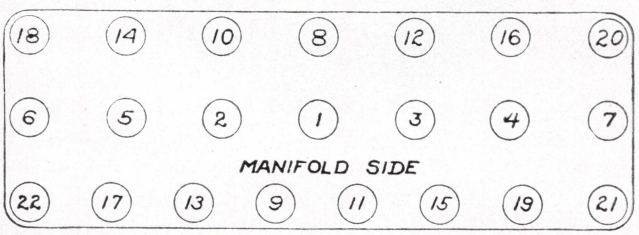


We recommend that every jobber's shop and automotive service station be equipped with one of these wrenches. They will offset their cost many times.

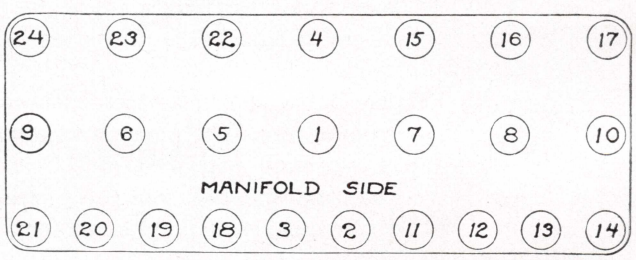
Order for Tightening Cylinder Stud Nuts

The proper **order** for tightening down the studs of a cylinder head is also vitally important in preventing engine distortion. The following diagrams show the standard order, and also special directions for certain Buick and Studebaker models. These diagrams should be followed carefully:

Standard Order



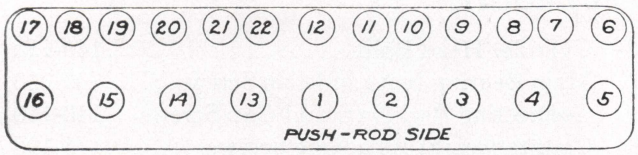
Studebaker Dictator Order



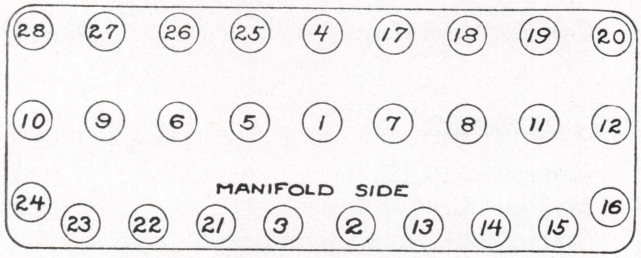
★ ★ ★

How to Install Cylinder Heads (*Cont'd.*)

Buick Eight Order



Studebaker Commander Order



If you do not have instructions from the motor manufacturer on the order for tightening the stud nuts of each motor, tighten nuts in the order indicated by the standard diagram.

The final tightening of stud nuts should be done after the motor has run a few hours or is thoroughly warmed up. It will then be found that the nuts can be drawn down further; however, when drawing the nuts down a second or third time follow the same order indicated by the above diagram.

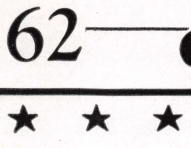
For ALUMINUM Heads

Run motor until it is operating at full normal temperature, then let it cool. When head and motor are cool, tighten the nuts to the final uniform tension.

Manufacturers' Recommended Tension Chart

The nuts or studs of a cylinder head must not only be drawn down uniformly and in the correct order, but to the **proper tension.** This varies widely with different makes of cars. Following are the tensions recommended by car builders. You will note that some builders include, also, the proper tensions for connecting rods, main bearing nuts, flywheel nuts, etc. It is important that these recommendations be followed carefully—and again, we believe that a tension indicating wrench is essential for accurate, satisfactory work.

	Tension:
AUBURN	**All Models**
Cylinder Head Bolts	160-170
Connecting Rod Bolts	140-150
BUICK	**Series 40-60-80-90**
Cylinder Head Bolts	160-170
Cylinder Head Studs	160-170
Main Bearing Cap Screws	290-310
	Series 60-80-90
Connecting Rod Bolts	140-160
	Series 40
Connecting Rod Bolts	130-140
Main Bearing Bolts, ½-inch	330-340
CADILLAC	
Cylinder Head Bolts	160-170
CHEVROLET	**All Models**
Cylinder Head Bolts	175-185
Rocker Arms	75- 85
Main Bearing Bolts	280-290
CHRYSLER	**All Models**
Cylinder Head Bolts	140-150
Main Bearing Nuts and Cap Screws	200-220
Connecting Rod Nuts and Cap Screws	140-160
Counterweight Attaching Screws	175-195
CORD	
Cylinder Head Bolts	160-170
DE SOTO	
Cylinder Head Bolts	140-150
Main Bearing Nuts and Cap Screws	200-220
Connecting Rod Nuts and Cap Screws	140-160
Counterweight Attaching Screws	175-195



How to Install Cylinder Heads (*Cont'd.*)

	Tension:
DODGE	
Cylinder Head Bolts	140-150
Main Bearing Nuts and Cap Screws	200-220
Connecting Rod Nuts and Cap Screws	140-160
Counterweight Attaching Screws	175-195
FORD	
Aluminum Heads	100-110
Cast Iron Heads	130-140
Aluminum Heads with $\frac{7}{16}$-inch Studs	100-110
Cast Iron Heads with $\frac{7}{16}$-inch Studs	130-140
Cast Iron Heads with $\frac{1}{2}$-inch Studs	130-160
GRAHAM-PAIGE	**All Models**
Aluminum Heads	110-120
All Other Models	160-170
HUDSON	
Cylinder Head Bolts, $\frac{7}{16}$-inch and $\frac{1}{2}$-inch	170-180
LA SALLE	
Cylinder Head Bolts	160-170
NASH	**All Models**
Cylinder Head Bolts	150-170
OLDSMOBILE	**All Models**
Cast Iron Head Bolts, $\frac{7}{16}$-inch	200-220
Front Support Bracket, $\frac{3}{8}$-inch	110-130
Flywheel Nuts	100-120
Connecting Rod Bolts	90-100
Main Bearing Bolts	370-400
PACKARD	**All Models**
Cylinder Head Bolts	150-170

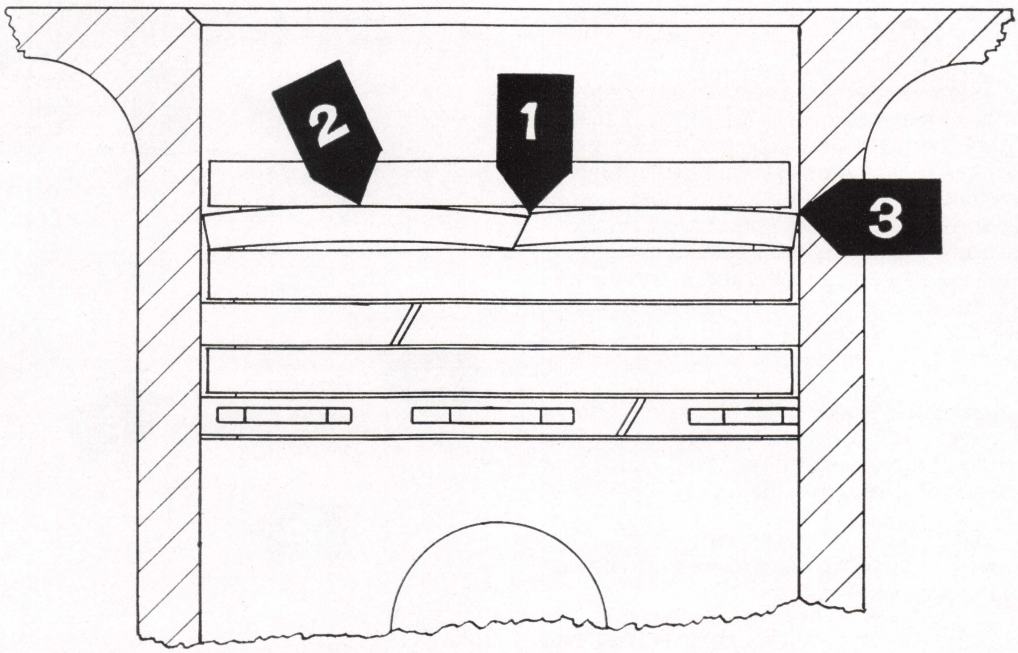
	Tension:
PLYMOUTH	
Cylinder Head Bolts	140-150
Main Bearing Nuts and Cap Screws	200-220
Connecting Rod Nuts and Cap Screws	140-160
Counterweight Attaching Screws	175-195
PONTIAC	
Cylinder Head Bolts, $\frac{7}{16}$-inch	190-210
STUDEBAKER	
Connecting Rod Bolts	150
Main Bearing Cap Screws	260
Crankshaft Counterweight Screw	150
8-Cylinder Aluminum Head, $\frac{1}{2}$-inch Studs	170-180
6-Cylinder Iron Head, $\frac{1}{2}$-inch Studs	220-230
TERRAPLANE	
Aluminum or Cast Iron Cylinder Head Bolts	140-150
WHITE	
Cylinder Head Bolts	175-185
Connecting Rod Bolts, $\frac{3}{8}$-inch	65- 75
Connecting Rod Bolts, $\frac{7}{16}$-inch	125-135
Main Bearing Nuts and Cap Screws, $\frac{9}{16}$-inch	250-275

MAIN BEARING CAP NUT pressure ranges from 200 to 400 points, depending upon the diameter of the bolt.

When main bearings are rebored, use the same tension for tightening the cap bolts after crankshaft is installed as was used in tightening cap bolts when boring the main bearings.

★ ★ ★

The Importance of Piston Ring End Clearance



As we all know, a piston ring must act as a seal to prevent compression and combustion pressures from blowing by into the crankcase. It must also act as a seal to prevent the oil from passing from the crankcase into the combustion chamber. While it is doing this job it is often sliding over the surface of the cylinder walls at speeds of 3000 ft. per minute. In order to have a ring do this job correctly it must be absolutely free to move in the piston ring groove. Therefore it must have at least .001 side clearance in the ring groove. In some cases this clearance may run as high as .0035 in the upper compression groove.

Piston rings expand under heat. This tends to make them longer, thus decreasing the gap or end clearance which is allowed. If the end clearance is too little the ring ends will "butt" as shown in the exaggerated sketch. When the rings are butted (see No. 1) they become wedged in the groove (see No. 2) and are not free to conform to the cylinder wall. The butting also causes the ring to warp, break and wear down the scraping edges (see No. 3). Under these conditions no piston ring can perform its sealing functions. If the butted condition is serious it may cause the ring to break, crack the piston ring lands, seize and pull the piston head off, score the cylinder wall and cause poor engine performance in general.

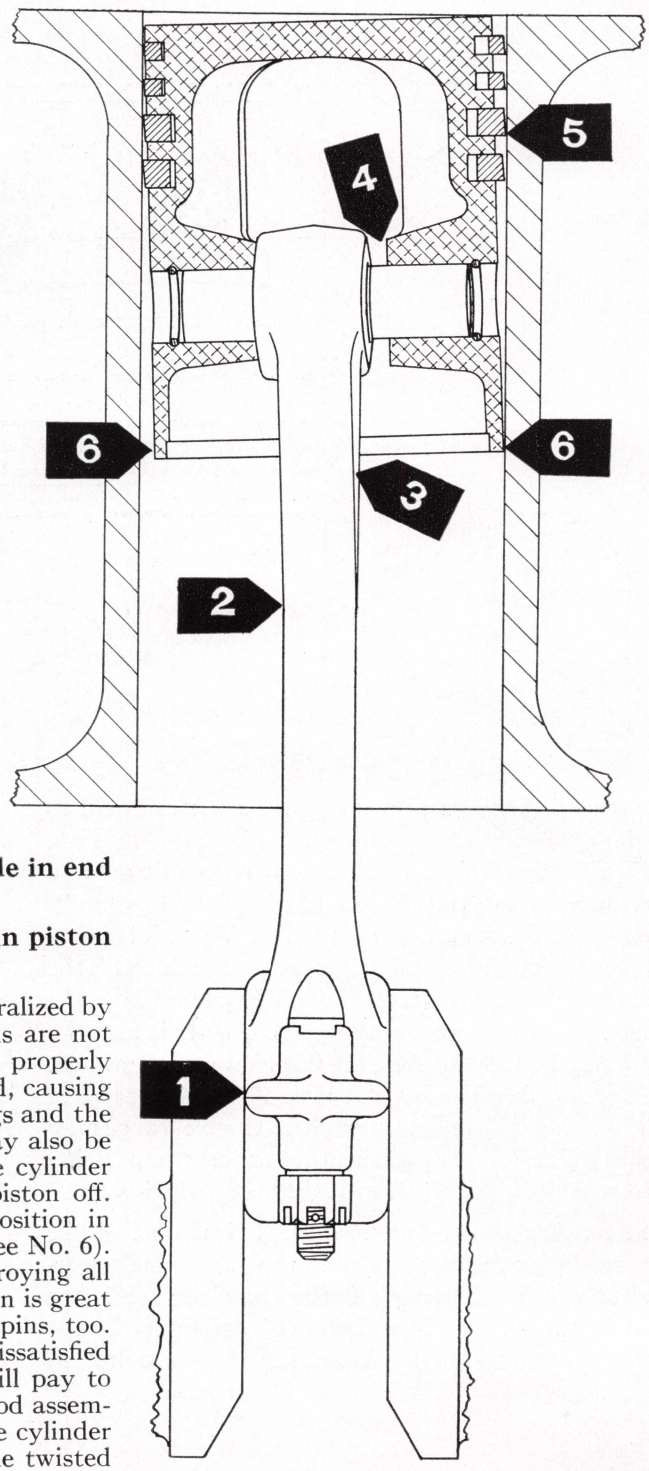
The job of checking piston ring clearance is very easy and requires very little time. It should be one of the routine operations in **all** piston ring installations. The rule, instead of the exception, should be to give **more than enough** end clearance. **It is better to have .040 too much than .001 too little.**

★ ★ ★

Alignment of Connecting Rod Assembly

Many a ring, piston, pin, bearing or complete engine reconditioning job is spoiled because of the misaligned installation of the connecting rod assembly. Misaligned rods seriously affect engine performance through the pistons, pins and piston rings. Heavy blow-by, excessive oil consumption, piston collapse and broken pistons, pins and rings are common results.

At the right is an exaggerated sketch showing the effect of a misaligned rod on the piston and piston rings. We have pointed out the spots where errors are apt to occur. You might say that with modern means of production, errors should not exist in connecting rods and pistons to the extent that re-alignment is necessary. It so happens that every engine manufacturer takes certain tolerances and limits within which he attempts to hold his work. The limits may be only a few ten-thousandths of an inch on each dimension, but on an assembly of parts like the connecting rod assembly (pistons, pins, and rings) the **accumulation** of errors may have a detrimental effect. This is particularly true when engines must be overhauled and new connecting rod bearings, piston pins, etc. installed.



There are at least five main reasons why connecting rod assemblies should be checked for misalignment and corrected where necessary:

(1) **Error in the boring of the connecting rod bearing (see No. 1).**

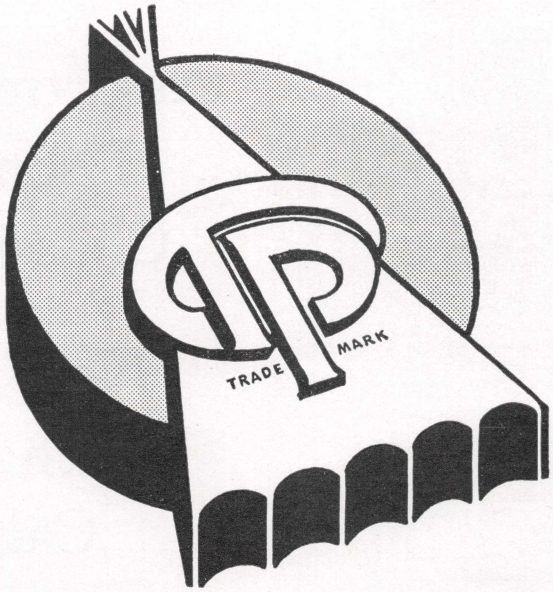
(2) **Bend in the connecting rod (see No. 2).**

(3) **Twist in the connecting rod (see No. 3).**

(4) **Error in reaming or boring piston pin hole in end of connecting rod (see No. 4).**

(5) **Error in the boring of the piston pin hole in piston (see No. 5).**

Errors in any one or all of these positions can be neutralized by proper connecting rod alignment. If the corrections are not made it is impossible for the piston ring to function properly because the scraping edges are broken or worn round, causing them to lose their effectiveness (see No. 5). The rings and the grooves become clogged with carbon. The rings may also be wedged in the groove and cause the scuffing of the cylinder wall, or seizure which may pull the head of the piston off. Furthermore the piston must operate in a cocked position in the cylinder bore, with reduced skirt bearing area (see No. 6). The piston becomes distorted in this position, destroying all the benefits gained by cam grinding. If the distortion is great enough it is possible to score the pistons and piston pins, too. All these factors lead to poor engine performance, dissatisfied customers, loss of profit and future business. It will pay to adopt a policy of carefully checking **all** connecting rod assemblies for alignment before they are re-installed in the cylinder block. Even in normal operation they often become twisted or bent.



CATALOG OF

Thompson Assortments

(Issued June 1, 1938)

Tepee Chassis Parts Merchandiser . . . . . Page 66
Engine Rebuilding Kits . . . . . Page 69
Valve Assemblies . . . . . Page 71
King Bolt Assemblies . . . . . Page 71
Water Pump Parts Assortments . . . . . Page 74
Water Pumps Assortments . . . . . Page 76

THOMPSON PRODUCTS · INC.

CLEVELAND · OHIO · U. S. A.

PRINTED IN U.S.A.

Assortment D13 Thompson Chassis Parts

including

New Tepee Merchandising Cabinet

ALPHABETICAL LIST

•

Actual size of Tepee Merchandising Stand is 60 inches high, 30 inches wide, 8½ inches deep.

•

Assortment D13 includes a carefully selected stock of FAST-SELLING TIE ROD SOCKETS, KING BOLT ASSEMBLIES, TRYON and SILENT "U" SPRING SHACKLES and OILITE SPRING DISCS for servicing *over 100 popular Car and Truck Models* as shown on the following Alphabetical List. The attractive Merchandising Cabinet pictured in this catalog is supplied *without cost to the repairman,* when stocked with the profitable parts shown on the alphabetical lists. See Assortment D13 NUMERICAL LIST immediately following the Alphabetical List.

TIE ROD SOCKETS

(IN THOMPSON CHASSIS PARTS ASSORTMENT D13)
19 Pairs service over 100 Car Models

Make	*Model*	*Years*	*Stock No.*
Buick	40 (Right and Left Hand Assy.)	1934-36	ES40
Buick	40, 60, 80, 90 (Right and Left Hand Assy.)	1937	ES58
Buick	40, 60 (Right and Left Hand Assy.)	1938	ES71
Buick	80, 90 (Right and Left Hand Assy.)	1938	ES58
Cadillac	60 (Right and Left Hand Assy.)	1936	ES47
Chevrolet	Six	1930-38	RS29
Chrysler	CA, CB, C6, CZ (Right Hand Assy.)	1934-35	ES35
Chrysler	CA, CB, C6, CZ (Left Hand Assy.)	1934-35	ES36
Chrysler	CU, CV, C1, C2, C3, C9, C10, C11, Airflow	1934-37	ES49
Chrysler	C14, C16, C18, C19 (Right Hand Assy.)	1937-38	ES60
Chrysler	C14, C16, C18, C19 (Left Hand Assy.)	1937-38	ES61
De Soto	SF, Airstream (Right Hand Assy.)	1935	ES35
De Soto	SF, Airstream (Left Hand Assy.)	1935	ES36
De Soto	S3, S5 (Right Hand Assy.)	1937-38	ES60
De Soto	S3, S5 (Left Hand Assy.)	1937-38	ES61
Dodge	DP, DQ	1933	RS34
Dodge	DR, DS (Right Hand Assy.)	1934	ES35

(Continued on next page)

ASSORTMENT D13, TIE ROD SOCKETS (Cont'd)

Make	Model	Years	Stock No.
Dodge	DR, DS (Left Hand Assy.)	1934	ES36
Dodge	DU, D2, D5, D8	1935-38	ES57
Essex	Terraplane	1934	ES37
Ford	48, 50, 67, 68, 73, 74, 77, 78, 81A, 82A	1935-38	ES64
Graham	90, 110	1936	ES47
Hudson	LL, LT, Eight	1934	ES37
Hudson	63, De Luxe Six, 73	1936-37	ES46
Hudson	83, 84, 85, 87, 89	1938	ES72
Lafayette	3610	1936	ES40
La Salle	350 (Right Hand Assy.)	1934	ES38
La Salle	350 (Left Hand Assy.)	1934	ES39
La Salle	35-50, 36-50 (Right and Left Hand Assy.)	1935-36	ES47
Nash	3620, 3680	1936	RS26
Nash	3640, Light Six	1936	ES40
Oldsmobile	F34, L34 (Right Hand Assy.)	1934	ES38
Oldsmobile	F34, L34 (Left Hand Assy.)	1934	ES39
Oldsmobile	F35, F36, L35, L36 (Right and Left Hand Assy.)	1935-36	ES47
Oldsmobile	F37, F38, L37, L38 (Right and Left Hand Assy.)	1937-38	ES58
Plymouth	PC, PD, Six Cyl.	1933-34	RS34
Plymouth	PE, PF (Right Hand Assy.)	1934	ES35
Plymouth	PE, PF (Left Hand Assy.)	1934	ES36
Plymouth	PG, PJ, P1, P2, P3, P4, P5, P6	1934-38	ES57
Pontiac	Six and Eight	1933-36	RS29
Pontiac	Six and Eight (Right and Left Hand Assy.)	1937-38	ES58
Studebaker	56, 73, 82, B, C	1933-34	RS32
Terraplane	K, KU, KS, 6 Cyl.	1934	ES37
Terraplane	Special Six, 1935, 61, 62, 71, 72, 1936-37	1935-37	ES46
Terraplane	80, 81, 88	1938	ES72

King Bolt Assemblies

(IN THOMPSON CHASSIS PARTS ASSORTMENT D13)

Make	Model	Years	Stock No.
Chevrolet	Master Six (Without Knees)	1929-37	266AX
Chevrolet	Standard Six	1933-35	343AX
Chevrolet	Standard Six	1936	384AX
Chevrolet	Master Six (With Knees)	1934-38	351A C
Chevrolet Tr.	DB, EB, FB, GC, HC, HD, HE	1934-38	266AX
Chrysler	66, CI, CO, Six	1930-33	278AX
De Soto	Six and Eight	1929-33	278AX
Dodge	DD, DC, DH, DG, DL	1930-32	278AX
Dodge	DP, DQ	1933	337AX
Dodge	DU, D2, D5	1935-37	370AX
Dodge	D8	1938	370A B
Dodge Tr.	HC, HCL, KC, KCL	1933-34	337AX
Dodge Tr.	MC, MD15, RC, RD15	1937-38	370AX
Ford	A	1928-31	286AX
Ford	B, V-8	1932-34	318AX
Ford	48, 68	1935-36	372AX
Ford	74, 78	1937	389AX
Ford	81A, 82A	1938	389A B
Ford Tr.	A, ½ Ton	1928-31	286AX
Ford Tr.	B, ½ Ton	1932-34	318AX
Ford Tr.	50, 67, ½ Ton	1935-36	372AX
Ford Tr.	73, 77, ½ Ton	1937	389AX
Ford Tr.	81C, 82C, 81Y, 82Y	1938	389A B
La Salle	37-50, 38-50	1937-38	392AX
Plymouth	Four Cyl.	1929-32	278AX
Plymouth	PC, PD, PG, Six Cyl.	1933-34	337AX
Plymouth	PJ, P1, P2, P3, P4	1935-37	370AX
Plymouth	P5, P6	1938	370A B
Pontiac	All Six Cyl.	1928-33	266AX
Pontiac	Std. and Master Six	1935-36	266AX
Pontiac	Six and Eight	1937-38	392AX

Shackles

Tryon and Silent "U"

(IN THOMPSON CHASSIS PARTS ASSORTMENT D13)

Make	*Model*	*Years*	*Front Spring Stock No.*	*Rear Spring Stock No.*
Chevrolet	Master Six	1930-33	T701	T702
Chevrolet	Standard Six	1933-35	T701	T702
Chevrolet	Master Six (With Knees)	1934-38	None used	T735
Chevrolet	Master Six (Without Knees)	1935-38	T736	T735
Chevrolet	Standard Six	1936	T736	T735
Chevrolet Tr.	DB, EB, FB, ½ Ton	1934-38	T736	T735
Chrysler	CA, CB	1934	None used	SU811
Chrysler	C6, CZ, Airstream	1935	None used	SU835
De Soto	SF, Airstream	1935	None used	SU835
Dodge	DP, DQ	1933	SU812	SU813
Dodge	DR, DS	1934	None used	SU811
Dodge	DU, D2	1935-36	.....	SU835
Dodge Tr.	HC, HCL, KC, KCL	1933-34	SU812	SU813
Plymouth	PB, Four Cyl.	1932	SU810	SU811
Plymouth	PC, PD, PG, Six Cyl.	1933-34	SU812	SU813
Plymouth	PE	1934	None used	SU811
Plymouth	PF	1934	None used	SU813
Plymouth	PJ, P1, P2	1935-36	.....	SU835

Assortment D13

Thompson Chassis Parts

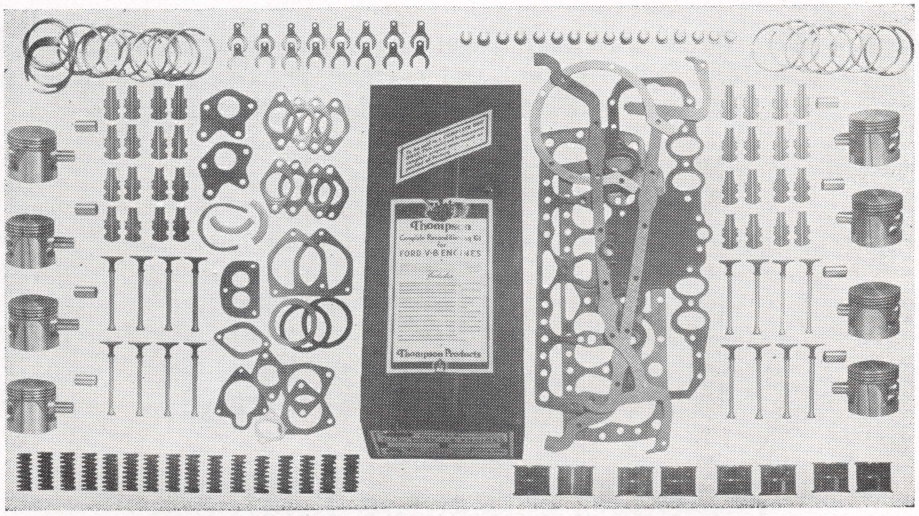
including

New Tepee Merchandising Cabinet

NUMERICAL LIST

Quantity	*Stock No.*	*Quantity*	*Stock No.*	*Quantity*	*Stock No.*	*Quantity*	*Stock No.*
2 sets	RS29	1 set	ES49	1	318AX	2	T701
1 set	RS32	1 "	ES57	2	337AX	2	T702
1 "	RS34	1 "	ES58	1	343AX	2	T735
1 "	ES35	1 "	ES60	2	351AC	2	T736
1 "	ES36	1 "	ES61	1	370AB	2	SU810
1 "	ES37	1 "	ES64	2	370AX	2	SU811
1 "	ES38	1 "	ES71	2	372AX	2	SU812
1 "	ES39	1 "	ES72	1	384AX	2	SU813
1 "	ES40	2	266AX	1	389AX	2	SU835
1 "	ES46	2	278AX	1	389AB	24	Spring Discs
1 "	ES47	1	286AX	1	392AX		

Complete Re-conditioning Kit for Ford V-8 Engines



Here are the QUALITY parts that make up the new Thompson "FA" assemblies for Ford V-8 engine reconditioning.

Note carefully: Pistons for these assemblies are supplied in any specified OVERSIZE and Con Rod Bearings .010 or .020 UNDERSIZE. When ordering these kits *be sure* to specify: (1) Stock Number; (2) Piston OVERSIZE; (3) Con Rod Bearing UNDERSIZE.

Complete Assortment Stock No.	*Assortment Less Rings and Bearings Stock No.*	*Piston Used*	*Models and Years*
FA-110	FA-116	L-646F (Robotype)	All Models, 1932-36
FA-111	FA-117	L-551F (Four Rings)	All Models, 1932-36
FA-112	FA-118	L-652F (Robotype)	85 H.P., 1937-38
FA-113	FA-119	L-700F (Heavy Duty)	85 H.P., 1937-38
FA-114	FA-120	L-649F (Strut)	85 H.P., 1937-38
FA-115	FA-121	L-642F (Aerotype)	All Models, 1932-36

BEARING UNDERSIZES:

Tenun..... .010 Twenun..... .020

Complete Assembly Includes:

Quantity	*Stock No.*	*Description*
8	(See above)	DIAMOND BORED Thompson Finished Pistons fitted with CHROME PLATED Piston Pins.
1		Complete Set FACTORY TYPE Piston Rings
8	PB703	Thompson Piston Pin Bushings
2	S-980AEX	Thompson Valve Assemblies
16	GR-950	Thompson Valve Guide Retainers
4 prs.		CADMIUM-SILVER-COPPER Connecting Rod Bearings
1		Gasket Set (Complete for 21 Stud Head)

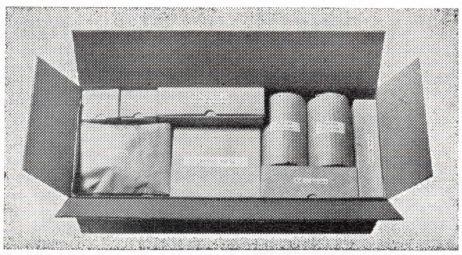
Complete Re-conditioning Kit for Ford "A" and "B" Engines

Note carefully: When ordering these kits be sure to specify: (1) Stock Number; (2) Piston OVERSIZE. When pistons .060 oversize or less are ordered we supply L-645AF; more than .060 oversize L-645F at a slightly higher price.

Complete Assortment Stock No.	*Assortment Less Rings Stock No.*	*Piston Used*	*Models and Years*
FA-122	FA-125	L-645AF (Robotype)	A, 1928-31
FA-122B	FA-125B	L-645AF (Robotype)	B, 1932-34
FA-123	FA-126	L-645F (Robotype)	A, 1928-31
FA-123B	FA-126B	L-645F (Robotype)	B, 1932-34
FA-124	FA-127	L-515F (Four Rings)	A, 1928-31
FA-124B	FA-127B	L-515F (Four Rings)	B, 1932-34

Complete Assembly Includes:

Quantity	*Stock No.*	*Description*
4	(See above)	DIAMOND BORED Thompson Finished Pistons fitted with CHROME PLATED Piston Pins
1		Complete Set FACTORY TYPE Piston Rings
4	PB652	Thompson Piston Pin Bushings
2	S-978AEX	Thompson Valve Assemblies
1		CAM GEAR .004 oversize
1		Gasket Set (Complete)



All parts are individually boxed and assembled in an attractive black and yellow box just 22 inches long.

Assortment D14
Thompson Valve Assemblies
ALPHABETICAL LIST

The Valve Assemblies in ASSORTMENT D14 will service *all* of the *popular Car and Truck Models* shown on the following Alphabetical List. Each Valve Assembly Set consists of all exhaust (or intake) valves, valve guides, valve springs, and valve retainer locks for *completely renewing* the old assembly. See Assortment D14 NUMERICAL LIST immediately following this Alphabetical List.

Make	*Model*	*Years*	*Exhaust Assembly Stock No.*	*Intake Assembly Stock No.*
Chevrolet	Master and Standard	1933	S590AEX	V591AIN
Chevrolet	Standard Six	1934	S590AEX	V591AIN
Chevrolet	Master Six	1934	S811AEX	V812AIN
Chevrolet	All Models (Gr. Stem)	1935-36	S858AEX	V859AIN
Chevrolet	All Models	1937	S942AEX	V943AIN
Chevrolet	All Models	1938	S988AEX	V943AIN
Dodge	DP, DQ, DR, DS, DU, D2, D5, D8.	1933-38	S588AEX	V589AIN
Ford	A, B, AA, BB (4 Cyl.)	1928-33	S800AEX	V750AIN
Ford	V-8, 48, 68, 50, 51, 67, 85 H.P.	1932-38	S950AEX	V950AIN
Ford	(S950 with .015 longer stem)	1932-38	S980AEX	S980AEX
Plymouth	All Six Cyl.	1933-38	S588AEX	V589AIN

Assortment D14
Thompson Valve Assemblies
NUMERICAL LIST

Quantity	*Stock No.*	*Quantity*	*Stock No.*	*Quantity*	*Stock No.*	*Quantity*	*Stock No.*
1	S588AEX	1	V750AIN	1	S858AEX	1	S950AEX
1	V589AIN	1	S800AEX	1	V859AIN	1	V950AIN
1	S590AEX	1	S811AEX	1	S942AEX	1	S980AEX
1	V591AIN	1	V812AIN	1	V943AIN	1	S988AEX

Assortment D15
King Bolt Assemblies
ALPHABETICAL LIST

The 23 sets of King Bolt Assemblies in ASSORTMENT D15 will service *over 100* of the *most popular Car and Truck Models,* as the following alphabetical list shows. Each King Bolt Assembly consists of a COMPLETE SET OF ALL PARTS required for renewing the old assembly—2 king bolts, bushings, bearings, plugs, lock pins, lock pin nuts, washers, etc. See Assortment D15 NUMERICAL LIST immediately following this Alphabetical List.

Make	*Model*	*Years*	*Stock No.*
Buick	34-40 to 37-40	1934-37	360AX
Buick	38-40, 38-60	1938	360AX
Chevrolet	Master Six (Without Knees)	1929-37	266AX
Chevrolet	Standard Six	1933-35	343AX
Chevrolet	Standard Six	1936	384AX
Chevrolet	Master Six (With Knees)	1934-38	351A C

(Continued on next page)

ASSORTMENT D15, KING BOLT ASSEMBLIES (Cont'd)

Make	Model	Years	Stock No.
Chevrolet Tr.	DB, EB, FB, GC, HC, HD, HE	1934-38	266AX
Chevrolet Tr.	LQ, LR, LS, 1½ Ton	1929-30	266AX
Chrysler	66, CI, CO, Six	1930-33	278AX
Chrysler	C6, C7	1935-36	355AX
De Soto	Six and Eight	1929-33	278AX
De Soto	SF, SI	1935-36	355AX
Dodge	DD, DC, DH, DG, DL	1930-32	278AX
Dodge	DP, DQ	1933	337AX
Dodge	DR to 3681755, DS to 4528655	1934	354AX
Dodge	DR after 3681755, DS after 4528655	1934	355AX
Dodge	DU, D2, D5	1935-37	370AX
Dodge	D8	1938	370A B
Dodge Tr.	HC, HCL, KC, KCL	1933-34	337AX
Dodge Tr.	MC, MD15, RC, RD15	1937-38	370AX
Ford	A	1928-31	286AX
Ford	B, V-8	1932-34	318AX
Ford	48, 68	1935-36	372AX
Ford	74, 78	1937	389AX
Ford	81A, 82A	1938	389A B
Ford Tr.	A, ½ Ton	1928-31	286AX
Ford Tr.	B, ½ Ton	1932-34	318AX
Ford Tr.	50, 67, ½ Ton	1935-36	372AX
Ford Tr.	73, 77, ½ Ton	1937	389AX
Ford Tr.	81C, 82C, 81Y, 82Y	1938	389A B
Hudson	All 6 and 8 Cyls.	1934-36	342AX
Hudson	73, 74, 75, 76, 77	1937	390AX
Hudson	83, 84, 85, 87, 89	1938	395AX
La Salle	350, 35-50, 36-50	1934-36	363AX
La Salle	37-50, 38-50	1937-38	392AX
Oldsmobile	All 6 and 8 Cyls.	1934-36	363AX
Oldsmobile	All 6 and 8 Cyls.	1937-38	392AX
Plymouth	Four Cyl.	1929-32	278AX
Plymouth	PC, PD, PG, Six Cyl.	1933-34	337AX
Plymouth	PE	1934	354AX
Plymouth	PF	1934	356AX
Plymouth	PJ, P1, P2, P3, P4	1935-37	370AX
Plymouth	P5, P6	1938	370A B
Pontiac	All Six Cyl.	1928-33	266AX
Pontiac	Std. and Mas. Six	1935-36	266AX
Pontiac	Straight Eight	1933	266AX
Pontiac	Straight Eight, De Luxe Six	1934-36	351AP
Pontiac	All 6 and 8 Cyls.	1937-38	392AX
Terraplane	All 6 and 8 Cyls.	1933-36	342AX
Terraplane	70, 71, 72	1937	390AX
Terraplane	80, 81, 82, 88	1938	395AX

Assortment D15
King Bolt Assemblies

NUMERICAL LIST

Quantity	Stock No.	Quantity	Stock No.	Quantity	Stock No.	Quantity	Stock No.
2	266AX	1	343AX	*1	360AX	1	389AX
1	278AX	2	351A C	*1	363AX	1	389A B
1	286AX	*1	351AP	1	370A B	*1	390AX
1	318AX	*1	354AX	2	370AX	1	392AX
1	337AX	*1	355AX	2	372AX	*1	395AX
*1	342AX	*1	356AX	1	384AX		

*Indicates not included in Assortment D16

Assortment D16
King Bolt Assemblies

ALPHABETICAL LIST

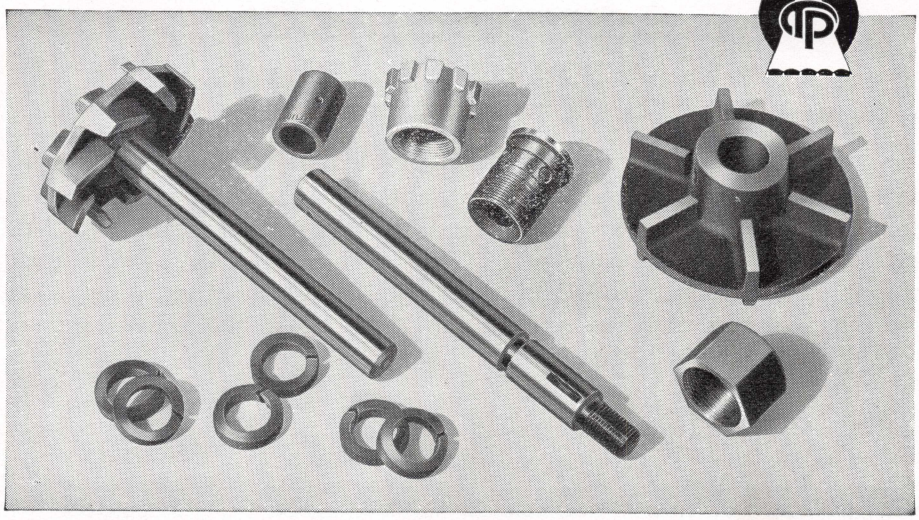
The 14 sets of King Bolt Assemblies in ASSORTMENT D16 will service *over 80* of the *most popular Car and Truck Models,* as the following Alphabetical List shows. Each King Bolt Assembly consists of a COMPLETE SET OF ALL PARTS required for renewing the old assembly—2 king bolts, bushings, bearings, plugs, lock pins, lock pin nuts, washers, etc. See Assortment D16 NUMERICAL LIST immediately following this Alphabetical List.

Make	*Model*	*Years*	*Stock No.*
Chevrolet	Master Six (Without Knees)	1929-37	266AX
Chevrolet	Standard Six	1933-35	343AX
Chevrolet	Standard Six	1936	384AX
Chevrolet	Master Six (With Knees)	1934-38	351AC
Chevrolet Tr.	DB, EB, FB	1934-36	266AX
Chevrolet Tr.	LQ, LR, LS, 1½ Ton	1929-30	266AX
Chrysler	66, CI, CO, Six	1930-33	278AX
De Soto	Six and Eight Cyl.	1929-33	278AX
Dodge	DD, DC, DH, DG, DL	1930-32	278AX
Dodge	DP, DQ, Six	1933	337AX
Dodge	DU, D2, D5, Six	1935-37	370AX
Dodge	D8	1938	370AB
Dodge Tr.	HC, HCL, KC, KCL	1933-34	337AX
Dodge Tr.	MC, MD15, RC, RD15	1937-38	370AX
Ford	A	1928-31	286AX
Ford	B, V-8	1932-34	318AX
Ford	V-8, 48, 68	1935-36	372AX
Ford	74, 78	1937	389AX
Ford	81A, 82A	1938	389AB
Ford Tr.	A, ½ Ton	1928-31	286AX
Ford Tr.	B, ½ Ton	1932-34	318AX
Ford Tr.	50, 67, ½ Ton	1935-36	372AX
Ford Tr.	73, 77, ½ Ton	1937	389AX
Ford Tr.	81C, 82C, 81Y, 82Y	1938	389AB
Oldsmobile	All 6 and 8 Cyl.	1937-38	392AX
Plymouth	Four Cyl.	1929-32	278AX
Plymouth	PC, PD, PG, Six Cyl.	1933-34	337AX
Plymouth	PJ, P1, P2, P3, P4	1935-37	370AX
Plymouth	P5, P6	1938	370AB
Pontiac	All Six Cyl.	1928-33	266AX
Pontiac	Standard and Master Six	1935-36	266AX
Pontiac	Straight Eight	1933	266AX
Pontiac	All 6 and 8 Cyl.	1937-38	392AX

Assortment D16
King Bolt Assemblies

NUMERICAL LIST

Quantity	*Stock No.*	*Quantity*	*Stock No.*	*Quantity*	*Stock No.*	*Quantity*	*Stock No.*
2	266AX	1	337AX	1	370AB	1	389AB
1	278AX	1	343AX	2	372AX	1	392AX
1	286AX	2	351AC	1	384AX		
1	318AX	2	370AX	1	389AX		



Assortment D17—Water Pump Parts

Assortment D17 includes all the parts most frequently needed for repairing water pumps on FORD, CHEVROLET and PLYMOUTH cars. Parts are individually boxed and plainly marked with stock numbers. This assortment includes the following parts:

Water Pump Parts for CHEVROLET

Quantity	*Stock No.*	*Mf'rs Part No.*	*Description*
2	PB272	838758	Front Bushing, All Sixes, 1938
2	PB273	838759	Rear Bushing, All Sixes, 1938
2	PB255	838468	Front Bushing, All Sixes, 1937
2	PB256	838141	Rear Bushing, All Sixes, 1937
2	PK313		Packing (Seal Assembly), All Sixes, 1937-38
2	PB80	837034	Front Bushing, All Sixes, 1929-36
2	PB7	837193	Rear Bushing, All Sixes, 1929-36
2	PN4	835565	Packing Nut, All Sixes, 1929-36
2	PK102	353298	Packing, All Sixes, 1929-36
2	PK202		Packing with Spacer, All Sixes, 1929-36

Water Pump Parts for FORD

Quantity	*Stock No.*	*Mf'rs Part No.*	*Description*
2	PB250	78-8520	Front Bushing, 85 H.P., 1937-38
2	PK315		Packing (Seal Assembly), 85 H.P., 1937-38
4	PB155	18-8520	Front and Rear Bushing, All 8 Cyl., 1932-36
2	PK301		Packing (Seal Assembly) All 8 Cyl., 1932-36
2	PB1	B-8520	Rear Bushing, All 4 Cyl., 1928-32
1	PB34	A-8529R	Front Bushing, Model A, 1928-31
2	PN100	B-8523	Packing Nut (Alum.) All 4 Cyl., 1928-32
2	PK101	B-8524	Packing, All 4 Cyl., 1928-32

Water Pump Parts for PLYMOUTH

Quantity	*Stock No.*	*Mf'rs Part No.*	*Description*
2	PB186	600802	Front Bushing, All Sixes, 1933-38
2	PB187	600803	Rear Bushing, All Sixes, 1933-38
2	PK300		Packing (Seal Assembly) All Sixes, 1933-38

Assortment D18 Water Pump Parts

Assortment D18 includes *all parts* in ASSORTMENT D17 and *in addition* Shaft and Impeller Assemblies for FORD, CHEVROLET and PLYMOUTH as follows:

Shaft and Impeller Assemblies for CHEVROLET

Quantity	*Stock No.*	*Mf'rs Part No.*	*Description*
1	PA181	838761	Assembly, All Sixes, 1938
1	PA148	838273	Assembly, All Sixes, 1937
1	PA135	836077	Assembly, All Sixes, 1936
1	PA119	837604	Assembly, All Sixes, 1935
1	PA88	473669	Assembly, Standard CC, DC, 1933-34
1	PA5	835818	Assembly, All Sixes, (Except Std.) 1929-34

Shaft and Impeller Assemblies for FORD

Quantity	*Stock No.*	*Mf'rs Part No.*	*Description*
2	PA152		Assembly, 85 H.P., 1937-38
2	PA140	68-8510	Assembly, 48, 68, 1935-36 (Spiral Vane Impeller)
2	PA77	18-8510	Assembly, V8, 18, 40, 48, 68 (Straight Vane Impeller)
1	PA1	A-8510	Assembly, Model A, 1928-31

Shaft and Impeller Assemblies for PLYMOUTH

Quantity	*Stock No.*	*Mf'rs Part No.*	*Description*
1	PA89	603062	Assembly including Seal, All Sixes, 1933-38

Assortment D19 Complete Water Pump Parts Sets

Assortment D19 consists of COMPLETE WATER PUMP PARTS SETS for entirely overhauling the original pumps on FORD, CHEVROLET and PLYMOUTH cars. Each set consists of:

Impeller and Shaft
All Necessary Bushings
New Packing Nut and Packing—
or Seal Assembly where used instead
of packing and nut

This assortment combines complete sets as follows:

Complete Water Pump Parts Sets for CHEVROLET

Quantity	*Stock No.*	*Description*
1	WS64	Parts Set Assembly, All Sixes, 1938
1	WS31	Parts Set Assembly, All Sixes, 1937
1	WS30	Parts Set Assembly, All Sixes, 1936
1	WS17	Parts Set Assembly, All Sixes, 1935
1	WS14	Parts Set Assembly, Standard CC, DC, 1933-34
1	WS5	Parts Set Assembly, All Sixes (Except Std.) 1929-34

ASSORTMENT D19, COMPLETE WATER PUMP PARTS SETS (Con't)

Water Pump Parts Sets for FORD

Quantity	*Stock No.*	*Description*
2	WS34	Parts Set Assembly, 85 H.P., 1937-38
2	WS32	Parts Set Assembly, 48, 68, 1935-36 (Spiral Vane Impeller)
2	WS13	Parts Set Assembly, V8, 18, 40, 48, 68 (Straight Vane Impeller)

Water Pump Parts Sets for PLYMOUTH

Quantity	*Stock No.*	*Description*
1	WS15	Parts Set Assembly, All Sixes, 1933-38

Assortment D20
Factory Type Water Pumps

Assortment D20 consists of complete FACTORY-TYPE PUMPS for FORD and CHEVROLET as listed below. These pumps are up to factory standards in every way and can be relied on to give identical service.

Factory Type Pumps

Quantity	*Stock No.*	*Name and Model*
1	FP981	Chevrolet, All Sixes, 1938
1	FP978	Chevrolet, All Sixes, 1937
1	FP972	Chevrolet, All Sixes, 1936
1	FP964	Chevrolet, All Sixes, 1935
1	FP962	Chevrolet, All Sixes (Except Std.), 1929-34
1	FP984	Ford, 85 H.P., (Right Hand), 1937-38
1	FP985	Ford, 85 H.P., (Left Hand), 1937-38
2	FP969	Ford, V8, 40, 48, 68, 1933-36

Assortment D21
Thompson Packless Water Pumps

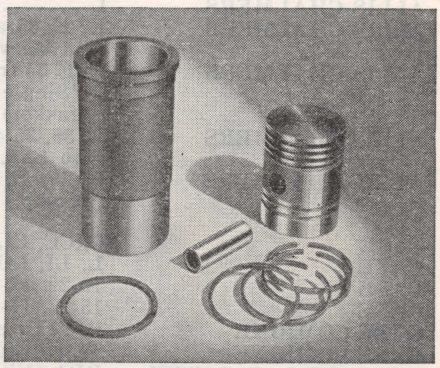
Assortment D21 consists of THOMPSON PACKLESS PUMPS for FORD, CHEVROLET and PLYMOUTH as listed below. We recommend this modern, leak-proof pump as the best possible investment for the car owner. It does away with the nuisance of constant taking-up and re-packing, and is insurance against the loss of costly "anti-freeze", which frequently causes severe damage to the engine through over-heating.

Packless Pumps

Quantity	*Stock No.*	*Name and Model*
1	WP979	Chevrolet, All Sixes, 1938
1	WP976	Chevrolet, All Sixes, 1937
1	WP971	Chevrolet, All Sixes, 1936
1	WP947	Chevrolet, All Sixes, 1935
1	WP901	Chevrolet, All Sixes (Except Std.), 1929-34
2	WP941	Ford, V8, 18, 40, 48, 68, 1932-36
1	WP953	Plymouth, All Sixes, 1935-38
1	WP936	Plymouth, PE, PF, PG, 1934

Alphabetical and Progressive Catalog Listing of Wet and Dry Cylinder Sleeves

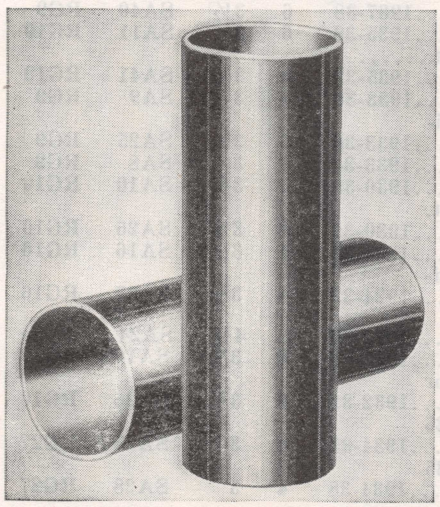
CHROME-NICKEL Iron Alloy WET Cylinder Sleeves

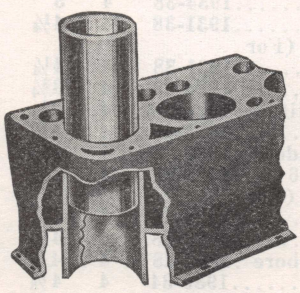


Thompson Wet Cylinder Sleeves are exact duplicates, dimensionally, of the original standard bore wet cylinder sleeves they replace. They are known as WET sleeves because they are actually the cylinder, and when installed in the engine block they are in contact with the water of the cooling system.

The Thompson Wet Cylinder Sleeve Assembly consists of the SLEEVE, PIN-FITTED PISTON, PISTON RINGS and RUBBER SEALING GASKET as shown in this catalog insert. The Sleeve and Rubber Gasket are also available separately where replacement of the piston and rings is not desired. We recommend, however, renewal of the entire assembly.

The chrome-nickel alloy of which Thompson Wet Sleeves are made assures an exceptionally dense, hard, uniform-wearing surface, free from distortion throughout the range of constantly variable engine temperatures.





For renewing broken or scored cylinders. Also more economical than new engine block where original cylinder bores have been oversized beyond point of efficient operation. Outlast the original cylinders.

CENTRIF-I-CAST DRY Cylinder Sleeves (Finished and Semi-Finished)

Thompson CENTRIF-I-CAST DRY Cylinder Sleeves are used not only to reclaim an engine cylinder which has been broken or deeply scored, but to avoid the higher cost of a new engine block when the bores of the original block have become over-size beyond the limit of satisfactory economy and operating efficiency.

Tests over a long period demonstrate that the original block, equipped with CENTRIF-I-CAST sleeves, gives longer wear than a new or rebored block. This is due largely to the CENTRIF-I-CAST method of manufacture and the iron alloy used. The special casting method and iron analysis give a closer grain, capable of taking a high finish, free from hard and soft spots. Wear, as it occurs, is more uniform throughout the entire bearing surface of the cylinder. CENTRIF-I-CAST is free from blow holes and other defects often found in the ordinary cast iron cylinder sleeve or re-liner. These qualities, combined with careful machining and inspection, provide efficient, economical sealing for a longer time than the original integral engine block metal.

Thompson Products, Inc.

CLEVELAND, OHIO

Alphabetical List of CHROME-NICKEL IRON Alloy WET SLEEVE ASSEMBLIES

Make	Model	Years	No. of Cyls.	Bore Diam.	Stock No.	Rubber Gasket No.
ALLIS CHALMERS	B	1938	4	3¼	SA50	RG50
ALLIS CHALMERS	W, WC	1933-38	4	4	SA32	RG32
ALLIS CHALMERS	U, UC, M, UM, Speed Patrol Grader	1934-38	4	4⅜	SA29	RG29
ALLIS CHALMERS	L	1932-38	6	5¼	SA30	RG30
ALLIS CHALMERS	K, E, 35 after Eng. K8330 (2 grooves in sleeve for rubber gaskets)	1935-38	4	5	SA47	RG30
ALLIS CHALMERS	K, E, 35 from Eng. K2670 to Eng K8330 (Single groove in block for rubber gasket)	1932-35	4	5	SA31	RG2
ALLIS CHALMERS	E, 35, 25-40 after Eng. 32749; K, E, 35 to Eng. K2670	1929-34	4	4¾	SA2	RG2
ALLIS CHALMERS	20-35, E, 18-30 to Eng. 32749. (High Comp.)	1919-29	4	4¾	SA2	RG2
CASE	C, CC, CI, CO, CE, 17-27	1929-38	4	3⅞	SA4	RG4
CASE	L, LI, LO, 26-40	1929-38	4	4⅝	SA7	RG7
CASE	12-20, 12-20A	1920-33	4	4⅛	SA6	RG6
CASE	15-27, 18-32, 18-32K	1918-29	4	4½	SA5	RG5
CASE COMBINE	P, Prairie 12-16-20 Cut	1920-34	4	3⅞	SA4	RG4
CASE COMBINE	W, Hillside 14-16 Cut		4	4⅛	SA6	RG6
CATERPILLAR DIESEL	RD4 (Nitricastiron)	1937-38	4	4¼	NSA48	RG48
CATERPILLAR DIESEL	RD6, RD7, RD8 (Nitricastiron)	1937-38	3-4-6	5¾	NSA49	RG49
INTERNATIONAL TRUCK	D35, DS35, D35B, FAB241	1937-38	6	3⅜	SA43	RG9
INTERNATIONAL TRUCK	D40, FAB259	1937-38	6	3½	SA40	RG9
INTERNATIONAL TRUCK	A5, A6, C55, C60, FBB3	1935-38	6	3¾	SA11	RG10
INTERNATIONAL TRUCK	A5, A6, C55, C60, FBB3 (For 5000 ft. Altitude)	1935-38	6	3¾	SA41	RG10
INTERNATIONAL TRUCK	B4, C35, C40, FAB3	1933-36	6	3 7/16	SA9	RG9
INTERNATIONAL TRUCK	B4, C35, C40, FAB3 (For 5000 ft. Altitude)	1933-36	6	3 7/16	SA25	RG9
INTERNATIONAL TRUCK	B3, FAB2	1933-34	6	3 5/16	SA8	RG9
INTERNATIONAL TRUCK	A4, A5, A6, C50, FBB	1930-35	6	3⅝	SA10	RG10
INTERNATIONAL TRUCK	A4, A5, A6, C50, FBB (For 5000 ft. Altitude)	1930-35	6	3⅝	SA26	RG10
INTERNATIONAL TRUCK	F, 33, 43; 54L Bus	1924-33	4	3¾	SA16	RG16
INTERNATIONAL TRUCK	F, 33, 43; 54L Bus (For 5000 ft. Altitude)	1924-33	4	3¾	SA37	RG16
MASSEY HARRIS	20-35, 25	1927-36	4	4⅜	SA24	None
McCORMICK DEERING	TracTracTor TA40, IA40, WA40	1932-38	6	3⅝	SA10	RG10
McCORMICK DEERING	TracTracTor TA40, IA40, WA40 (For 5000 ft. Altitude)	1932-38	6	3⅝	SA26	RG10
McCORMICK DEERING	F12, I12, O12, W12 after Eng. FS3035 (4 Ring Piston)	1934-35	4	3	SA27	RG27
McCORMICK DEERING	F12, I12, O12, W12, after Eng. FS3035 (5 Ring Piston)	1934-38	4	3	SA28	RG27
McCORMICK DEERING	F12, O12, W12 after Eng. FS3035 (For 5000 ft. Altitude)	1934-38	4	3	SA39	RG27
McCORMICK DEERING	Farmall F30, 20-30, I30, W30	1931-38	4	4¼	SA17	RG14
McCORMICK DEERING	Farmall F30, 20-30, I30, W30 (For 5000 ft. Altitude)	1931-38	4	4¼	SA36	RG14
McCORMICK DEERING	Farmall F20, T20	1924-38	4	3¾	SA16	RG16
McCORMICK DEERING	Farmall F20, T20 (For 5000 ft. Altitude)	1924-38	4	3¾	SA37	RG16
McCORMICK DEERING	10-20, Ind. 20	1923-38	4	4¼	SA14	RG14
McCORMICK DEERING	10-20, Ind. 20 (For 5000 ft. Altitude)	1923-38	4	4¼	SA36	RG14
McCORMICK DEERING	15-30, 22-36, after Serial TG99926	1929-38	4	4¾	SA13	RG12
McCORMICK DEERING	15-30, 22-36 after Serial TG99926 (For 5000 ft. Altitude)	1929-38	4	4¾	SA38	RG12
McCORMICK DEERING	15-30 to Serial TG99926	1923-28	4	4½	SA12	RG12
McCORMICK DEERING	To change 4½ bore 15-30 to 4¾ bore	1923-28	4	4¾	SA12A	RG12
MINNEAPOLIS MOLINE	27-42	1930-34	4	4⅞	SA45	RG35
MINNEAPOLIS MOLINE	17-30B	1926-35	4	4⅞	SA35	RG35
MINNEAPOLIS MOLINE	17-30A	1921-35	4	4¾	SA34	RG34
MINNEAPOLIS MOLINE	12-20, 17-28, KT, MT, 11-20, 13-25 Universal, Kombination to Eng. 525400	1919-35	4	4¼	SA20	None

Alphabetical List of CHROME-NICKEL IRON Alloy WET SLEEVE ASSEMBLIES (Cont.)

Make	Model	Years	No. of Cyls.	Bore Diam.	Stock No.	Rubber Gasket No.
MONARCH	K, 35 after Eng. K2670	1931	4	5	SA31	RG2
MONARCH	K, 35 to Eng. K2670	1930-31	4	4 3/4	SA2	RG2
OLIVER HART PARR	Row Crop 70	1935-38	6	3 1/8	SA44	RG44
OLIVER HART PARR	18-28, Standard Row Crop	1930-36	4	4 1/8	SA46	RG46
OLIVER HART PARR	A-3-5, 28-44	1930-36	4	4 3/4	SA33	RG33
TWIN CITY	12-20, TW, TY, 17-28, KT, MT, 11-20, 13-25	1919-34	4	4 1/4	SA20	None
WALLIS	J, K, K3, OK, OKO, Cub Jr. 15-27	1917-26	4	4 1/4	SA22	None
WHITE	12A Engine	1936-38	12	3 25/32	SA42	RG42

NOTE: Sleeve only can be supplied on request. To order use assembly number with SO for prefix instead of SA.
See price list for prices of "SO" numbers.
Where no rubber gasket is shown an asbestos gasket is used. Asbestos gaskets not supplied as they do not need to be replaced.

NUMBERS LISTED BELOW ARE NOT COMPLETE ASSEMBLIES: SL250F and SL251F ARE SLEEVES ONLY.

G.M.C. TRUCK, K101, K102, K71, 1921-28....	SL251F	4	4 1/2
G.M.C. TRUCK, K41, A, B, C.....	SL250F	4	4

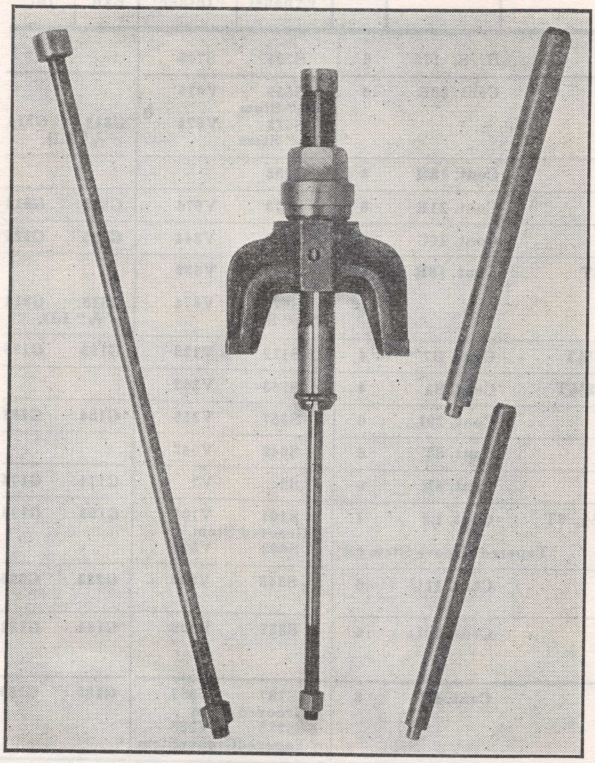
Progressive List of CENTRIF-I-CAST DRY Cylinder Sleeves

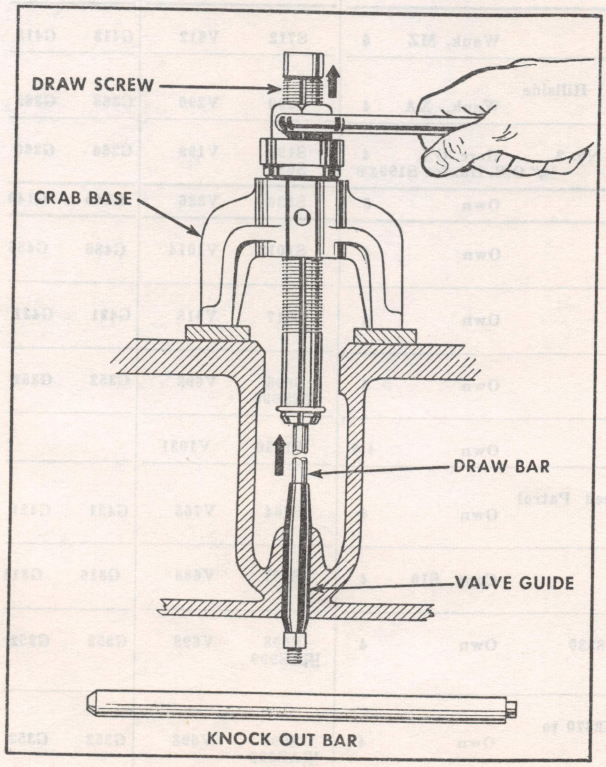
SEMI-FINISHED			FINISHED TO 1/8" WALL			FINISHED TO 3/32" WALL		
Stock No.	Bore Diam.	Length	Stock No.	Bore Diam.	Length	Stock No.	Bore Diam.	Length
			SL98F	2 1/2	8			
SL100	2 5/8	9	SL100F	2 5/8	8	SL598F	2 1/2	8
SL101	2 11/16	9	SL101F	2 11/16	8	SL600F	2 5/8	8
SL102	2 3/4	9 1/2	SL102F	2 3/4	8 1/2	SL601F	2 11/16	8
SL103	2 13/16	9 1/2	SL103F	2 13/16	8 1/2	SL602F	2 3/4	8 1/2
SL104	2 7/8	9 3/4	SL104F	2 7/8	8 3/4	SL603F	2 13/16	8 1/2
SL105	2 15/16	9 3/4	SL105F	2 15/16	8 3/4	SL604F	2 7/8	8 3/4
SL106	3	9 1/2	SL106F	3	8 1/2	SL605F	2 15/16	8 3/4
SL107	3 1/16	10 1/8	SL107F	3 1/16	9 1/8	SL606F	3	8 1/2
SL108	3 1/8	10 1/8	SL108F	3 1/8	9 1/8	SL607F	3 1/16	9 1/8
SL109	3 3/16	11 1/4	SL109F	3 3/16	10 1/4	SL608F	3 1/8	9 1/8
SL110	3 1/4	11 1/4	SL110F	3 1/4	10 1/4	SL609F	3 3/16	10 1/4
SL111	3 5/16	11 1/4	SL111F	3 5/16	10 1/4	SL610F	3 1/4	10 1/4
SL112	3 3/8	10	SL112F	3 3/8	9	SL611F	3 5/16	10 1/4
SL113	3 7/16	10 3/4	SL113F	3 7/16	9 3/4	SL612F	3 3/8	9
SL114	3 1/2	10 3/4	SL114F	3 1/2	9 3/4	SL613F	3 7/16	9 3/4
SL115	3 9/16	10 3/4	SL115F	3 9/16	9 3/4	SL614F	3 1/2	9 3/4
SL116	3 5/8	11 1/2	SL116F	3 5/8	10 1/2	SL615F	3 9/16	9 3/4
SL117	3 11/16	11 1/2	SL117F	3 11/16	10 1/2	SL616F	3 5/8	10 1/2
SL118	3 3/4	12 1/4	SL118F	3 3/4	11 1/4	SL617F	3 11/16	10 1/2
SL119	3 13/16	12 1/4	SL119F	3 13/16	11 1/4	SL618F	3 3/4	11 1/4
SL120	3 7/8	10 3/4	SL120F	3 7/8	9 3/4	SL619F	3 13/16	11 1/4
SL170	3 15/16	10 3/4	SL170F	3 15/16	9 3/4	SL620F	3 7/8	9 3/4
SL122	4	12	SL122F	4	11	SL670F	3 15/16	9 3/4
SL124	4 1/8	12	SL124F	4 1/8	11	SL622F	4	11
SL126	4 1/4	13	SL126F	4 1/4	12	SL624F	4 1/8	11
SL128	4 3/8	12 3/8	SL128F	4 3/8	11 3/8	SL626F	4 1/4	12
SL130	4 1/2	13 3/8	SL130F	4 1/2	12 3/8	SL628F	4 3/8	11 3/8
SL132	4 5/8	13 3/8	SL132F	4 5/8	12 3/8	SL630F	4 1/2	12 3/8
SL134	4 3/4	14 1/2	SL134F	4 3/4	13 1/2	SL632F	4 5/8	12 3/8
SL135	4 13/16	14 1/2	SL135F	4 13/16	13 1/2	SL634F	4 3/4	13 1/2
SL136	4 7/8	13	SL136F	4 7/8	12	SL635F	4 13/16	13 1/2
SL138	5	13 3/4	SL138F	5	12 3/4	SL636F	4 7/8	12
SL140	5 1/8	15	SL140F	5 1/8	14	SL638F	5	12 3/4
SL142	5 1/4	15	SL142F	5 1/4	14	SL640F	5 1/8	14
SL144	5 3/8	15	SL144F	5 3/8	14	SL642F	5 1/4	14
SL146	5 1/2	14	SL146F	5 1/2	13	SL644F	5 3/8	14
SL150	5 3/4	16	SL150F	5 3/4	15	SL646F	5 1/2	13
SL154	6	17	SL154F	6	16	SL650F	5 3/4	15
SL162	6 1/2	15 3/4	SL162F	6 1/2	14 3/4	SL654F	6	16
						SL662F	6 1/2	14 3/4

ALPHABETICAL List of CENTRIF-I-CAST DRY Cylinder Sleeves

(Special finished sleeves CUT TO EXACT LENGTH with 1/8 in. wall thickness, except as noted)

Stock No.	Make of Car or Motor	Model	Year	No. of Cyls.	Bore Diam.
SL203F	AUSTIN	All	1930-35	4	2.2
SL309F	CHEVROLET	All (3/32 Wall)	1937-38	6	3 1/2
SL182F	CHEVROLET	All Sixes (1/8 Wall)	1929-36	6	3 5/16
SL202F	CHEVROLET	All Sixes (3/32 Wall)	1929-36	6	3 5/16
SL211F	CHEVROLET	All Fours	1913-28	4	3 11/16
SL275F	DEERE TRACTOR	D15-27		2	6 3/4
SL310F	FORD	60 H.P. (3/32 Wall)	1937-38	8	2.6
SL180F	FORD	V8 (1/8 Wall)	1932-36	8	3 1/16
SL201F	FORD	V8 (3/32 Wall)	1932-36	8	3 1/16
SL121F	FORD	A, AA, B, BB (1/8 Wall)	1928-34	4	3 7/8
SL200F	FORD	A, AA, B, BB (3/32 Wall)	1928-34	4	3 7/8
SL216F	FORDSON	All	1917-28	4	4
SL550F	G.M.C.	616 Motor	1930-36	6	4 7/8
SL217F	HALL SCOTT	50, 75, Fageol Bus	1922-29	6	4 1/4
SL221F	HOLT TRACTOR	5 Ton, M12, 25-40, T11		4	4 3/4
SL224F	HOLT TRACTOR	10 Ton		4	6 1/2
SL220F	LIBERTY TRUCK			4	4 3/4
SL225F	MACK	AB	1922-35	4	4 1/4
SL226F	MACK	AC	1922-35	4	5
SL227F	PIERCE AR. TRK.	W2, WC, RF, RD, R10	1920-28	4	4 1/2
SL308F	PLYMOUTH	All	1933-38	6	3 1/8
SL219F	WHITE	GN and GR Motors	1919-26	4	4 1/4
SL305F	WHITE	1A Motor	1928-35	6	4 3/8
SL222F	YELLOW COACH	Y	1924-26	6	4 1/4
SL223F	YELLOW COACH	Z	1924-26	6	4
SL306F	YELLOW COACH	A		6	4 5/8
SL307F	YELLOW COACH	W		8	3 5/16





TAKES THE GRIEF OUT OF VALVE GUIDE WORK

NO MORE uncertain reaming of old, "bell-mouth" guides with this tool on the market! It's now just as easy to install *new guides* and be sure of perfect valve stem alignment.

Removes the old guides and installs the new ones quickly and easily—and puts a profit into the job. Pulls in the new guides without pounding, distortion or burring. Eliminates the danger of cracking the cylinder block casting.

Operation very simple (see diagram). Complete directions with each tool.

Kit, neatly packed in hinged box, includes two nickel steel draw bars for different sized guides and two knock-out bars for driving out flanged type guides. Ball-bearing thrust washer between crab-leg base and draw screw nut facilitates turning nut with hand wrench. Well built throughout.

A real necessity when installing valve insert seats, which require *new guides* for accurate piloting of the recessing tool.

We recommend renewal with Thompson Graphited (self-lubricating) Valve Guides, which are finished to exact size for the corresponding valve stem *and therefore require no reaming.*

PRICES:

Description:	Net price to Garages
Kit complete, as illustrated	$4.00
Crab base	.95
Draw screw	.70
Draw screw nut with ball race thrust washer	1.35
Draw screw slot key	.20
Draw bar (3/8 or 5/16 dia.)	.30
Knock-out bar (1/2 or 5/8 dia.)	.20

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	A. C. F. TRUCK	1932-35	175A, 175B	H. S. 175	6	S705	S705		
2	ACME TRUCK	1932	8X, 4T	Cont. 20R	6	S639 ♂ 3/8" Stem S673 ♂ 7/16" Stem	V639 V674	G313 ♂ 7/16" I.D.	G314
3	ACME TRUCK	1932	10X, 5T	Cont. 15H	6	S233			
4	ACME TRUCK	1932	10X, 5T	Cont. 21R	6	S673	V674	G313	G314
5	ACME TRUCK	1929-32	46, 47, 3X, 2T	Cont. 16C	6	S641	V344	G225	G225
6	ACME TRUCK	1929-32	52, 56, 66, 6X, 2½, 3T	Cont. 18R	6	S639 ♂ 3/8" Stem S673 ♂ 7/16" Stem	V639 V674	G313 ♂ 7/16" I.D.	G314
7	ACME TRUCK	1926-31	90L, 125, 104, 150, 5, 6¼T	Cont. B7	4	S129	V129	G193	G193
8	ACME TRUCK	1925-30	24, 30, 41, 54, 1½, 2, 2½T	Cont. S4	4	S263	V263		
9	ACME TRUCK	1929	17, 1T	Cont. 29L	6	S357	V358	G184	G184
10	ACME TRUCK	1929	76, 3½T	Cont. 8T	6	S642	V643		
11	ACME TRUCK	1927-29	36, 1½T	Cont. 8R	6	S2	V2	G174	G174
12	ACME TRUCK	1916-29	A, AC, 60L, 90L, 2, 2½, 3T	Cont. L4	4	S101 ♂ Grooved Stem S608 Tapered Groove Stem*	V101 V608	G193	G193
13	ACME TRUCK	1928	44, 46, 2T	Cont. 11U	6	S343	V344	G225	G225
14	ACME TRUCK	1927-28	14, 16, 1T	Cont. 20L	6	S357	V358	G184	G184
15	ACME BUS	1929-30	K, 16-18 Pass.	Cont. 6B	6	S287 ♂ Grooved Stem S288 ♂ Tapered Groove Stem	V287 V288	G189	G189
16	ADVANCE RUMLEY TRACTOR	1928-33	19-6, Do All	Wauk. X	4	S290	V290	G368	G369
17	ADVANCE RUMLEY COMBINE	1931-33	Rumley 6A	Wauk. MZ	6	S712	V612	G413	G413
18	ADVANCE RUMLEY COMBINE		PT, PC, Prairie No. 3; Hillside No. 3	Wauk. XA	4	S290	V290	G368	G369
19	ADVANCE RUMLEY COMBINE		Prairie No. 2, Hillside No. 2	Herc. OX ⅛" O.S. Hd. for S199*	4	S199 S680	V199	G266	G266
20	AJAX	1926	21, 51	Own	6	S336	V336	G140	G140
21	ALLIS CHALMERS TRACTOR	1938	B	Own	4	S1013	V1014	G486	G486
22	ALLIS CHALMERS TRACTOR	1933-38	W, WC	Own	4	S917	V918	G421	G421
23	ALLIS CHALMERS TRACTOR	1932-38	L	Own	6	S698 卐AS999	V698	G352	G352
24	ALLIS CHALMERS TRACTOR	1935-37	KO, LO (Diesel)	Own	4-6	S1030	V1031		
25	ALLIS CHALMERS TRACTOR	1934-36	U, UC, M, UM, Speed Patrol Grader	Own	4	S764	V765	G421	G421
26	ALLIS CHALMERS TRACTOR	1930-34	United, U, UC	Cont. S10	4	S687	V688	G316	G316
27	ALLIS CHALMERS TRACTOR	1935-38	K, E, 35 after Eng. K8330	Own	4	S698 卐AS999	V698	G352	G352
28	ALLIS CHALMERS TRACTOR	1932-35	E, K, 35 from Eng. K2670 to Eng. K8330	Own	4	S698 卐AS999	V698	G352	G352

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS141														PB707	6
2	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C714	4 1/8	4 1/16	2 7/8	3-3/16, 1-1/4	P709	1.250	3 1/16	F	PB617	6
						†C822	4 1/8	5 5/16	2 7/8	2-3/16, 1-5/32, 2-1/4	P709	1.250	3 1/16	F	PB617	6
3	IS137	VS253	R90			†C514	4 1/2	5 1/16	3 5/8	4-1/4	P299	1.500	3 1/16	S	PB583	6
4	IS130	VS221				†C776	4 3/8	4 1/16	2 3/4	3-3/16, 1-1/4	P776	1.250	3 1/16	F	PB617	6
5	IS165	VS231	R12		†L389	C596	3 3/8	3 1/16	2 1/8	3-1/16, 1-5/32	P594	.859	2 7/8	F	PB600	6
6	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C709	4	4 1/16	2 1/16	3-3/16, 1-1/4	P709	1.250	3 1/16	F	PB617	6
						†C821	4	5 1/16	2 1/16	1-3/16, 2-1/16, 1-1/4	P709	1.250	3 1/16	F	PB617	6
7	IS156	VS70	R90			†C418	5	5 7/8	3 3/16	4-1/4	P288	1.500	4 1/16	S	PB578	4
8	IS137	VS198	R34			†C473	4 1/4	4 3/4	2 7/8	3-1/4	P277	1.500	3 1/16	F	PB574	4
9	IS100	VS251	R12			†C472	2 7/8	3 3/16	1 13/16	2-1/8, 1-3/16	P701	.734	2 1/16	F	PB552	6
10	IS148	VS198	R98			†C601	4 1/8	4 1/16	2 1/16	3-1/4	P601	1.250	3 1/16	S	PB579	6
11	IS165	VS19	R81			†C245	3 3/8	4 1/16	2 1/16	3-3/16	P0119	.860	3	S	PB503	6
12	IS140	VS67	R90 R91			†C158	4 1/2	5 1/16	3 5/8	4-1/4	P149	1.375	4	S	PB580	4
13	IS165	VS231	R12			†C479	3 1/4	3 3/4	2 1/16	3-3/16	P282	1.000	2 1/16	S	PB555	6
					L433		3 1/4	3 3/4	2 1/16	3-1/8, 1-5/32	P518	1.000	2 3/4	F	PB558	6
14	IS100	VS251	R12	L387	†L367		2 3/4	3 3/8	1 1/16	2-1/8, 1-3/16	P319	.734	2 3/8	F	PB552	6
						C457	2 3/4	3 3/8	1 1/16	3-3/16	P279	.734	2 1/16	S	PB552	6
15	IS143	VS92 ♂ Outer VS108 ♂ Inner	R34 R98			†C312	3 3/4	4 1/2	2 5/8	3-1/16	P085	1.125	3 1/16	S	PB532	6
16	IS104	VS343	R28			†C640 (B)	3 1/2	3 1/16	2 5/16	3-3/16	P719	.740	3 1/16	O		
17	IS136	VS359	R28			†C905 (B)	4 1/4	4 5/8	2 1/16	3-1/8, 1-3/16	P677	1.000	3 5/8	O		
18	IS104	VS343	R28			†C640 (B)	3 1/2	3 1/16	2 1/16	3-3/16	P719	.740	3 1/16	O		
19	IS111	VS205	R14			†C313 (B)	4	4 7/8	2 1/16	3-1/4	P040	1.375	3 1/2	O	PB586	8
20		VS49	R81	L309		†C435	3	3 1/4	1 1/16	3-1/8	P274	.750	2 1/16	S	PB550	6
21		VS431	R151			†C987 (B)	3 1/4	3 1/16	1 7/8	2-1/8, 1-3/16	P987	.990	2 7/8	O		
				Sleeve Assembly SA50												
22	IS101	VS382	R28			†C913 (B)	4	4 1/16	2 1/16	3-1/8, 1-3/16	P913	.989	3 1/2	O		
				Sleeve Assembly SA32												
23	IS140	VS363	R134			†C907	5 1/4	6 3/4	3 1/2	3-3/16, 1-1/4	P907	1.500	4 7/8	S	PB736	4
				Sleeve Assembly SA30												
24																
25	IS137	VS363				†C906	4 5/8	5	2 5/8	3-3/16, 1-1/4	P906	1.312	4 1/16	S	PB737	6
				Sleeve Assembly SA29												
26	IS137	VS231	R12			†C842	4 1/4	4 3/4	2 7/8	3-3/16, 1-1/4	P277	1.500	3 1/16	F	PB574	4
						C473	4 1/4	4 3/4	2 7/8	3-1/4	P277	1.500	3 1/16	F	PB574	4
27	IS140	VS363	R134			†C912	5	6 5/8	3 3/8	3-3/16, 1-1/4	P891	1.500	4 3/8	S	PB736	4
				Sleeve Assembly SA47 ♂ Sleeve is grooved for two packing rings.												
28	IS140	VS363	R134			†C912	5	6 5/8	3 3/8	3-3/16, 1-1/4	P891	1.500	4 3/8	S	PB736	4
				Sleeve Assembly SA31 ♂ For cylinder blocks with one packing ring groove.												

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin

Al-At Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	ALLIS CHALMERS TRACTOR	1929-34	E, 35, 25-40 after Eng. 32749; K, E, 35 to Eng. K2670	Own	4	S698 卐AS999	V698	G352	G352
2	ALLIS CHALMERS TRACTOR	1919-29	20-35, E, 18-30, Road Maintainer to Mtr. 32749	Mid.	4	S264	V264	G353	G353
3	ALLIS CHALMERS TRACTOR	1931	Monarch 75	LeRoi RX-1	4	S646	S646		
4	ALLIS CHALMERS TRACTOR	1929-30	Monarch F, 75 after 70218	LeRoi RX	4	S646	S646		
5	ALLIS CHALMERS TRACTOR	1927-29	Monarch F, 75 to 70218	LeRoi RX	4	S646	S646		
6	ALLIS CHALMERS TRACTOR	1922-27	15-25	Mid. 402	4	S266	V267	G354	G354
7	ALLIS CHALMERS COMBINE		Prairie No. 3, Hillside No. 3, 10-12 Cut	Wauk. XA	4	S290	V290	G368	G369
8	ALLIS CHALMERS COMBINE		Hillside No. 1, 12-16-20 Cut, Prairie No. 2, 16-20 Cut	Herc. OX ⅛" O.S. Hd. for S199	4	S199 S680	V199	G266	G266
9	AMERICAN LA FRANCE TRUCK	1925-31	W, 3, 3½, 4T	Own 2R	4	S285	V285		
10	AMERICAN LA FRANCE TRUCK	1929	Chief, 2T	Buda DW6	6	S610	V610	G236	G236
11	AMERICAN LA FRANCE TRUCK	1929	Big Chief	Buda GL6	6	S260	V261		
12	AMERICAN LA FRANCE TRUCK	1925-28	Z, Bus, 4R	Own 4R	4	S285	V285		
13	APPERSON	1925-26	St. Away 8	Lyc. 2H	8	S318	V319	G168	G168
14	APPERSON	1925-26	6-25	Lyc. 4HM	6	S318	V319	G168	G168
15	ARMLEDER TRK.	1935-36	TRDB, 15T	Herc. RXC	6	S659	V659	G267	G266
16	ARMLEDER TRK.	1934-36	61HA, 5, 7T	Herc. WXC2	6	S624 卐AS970	V625	G267	G267
17	ARMLEDER TRK.	1934-36	TRDA	Herc. YXC3	6	S619 ♂Drilled Stem S659	V619 V659	G267	G266
				Slotted Stem					
18	ARMLEDER TRK.	1932-34	11HA, 2, 3T	Cont. 16C	6	S641	V344	G225	G225
19	ARMLEDER TRK.	1932-36	71HA, TRD, 7-9T	Herc. YXC	6	S619	V619	G267	G266
20	ARMLEDER TRK.	1931-36	31HA, 41, 41HA, 3½, 5T	Herc. WXC	6	S624 卐AS970	V625	G267	G267
21	ARMLEDER TRK.	1930-33	21HA, 31, 2½, 3, 4T	Herc. WXB	6	S624 卐AS970	V625	G267	G267
22	ARMLEDER TRK.	1929-30	30-6, 40-6, 46, 1½, 2T	Buda HS6	6	S640	V640	G240	G240
23	ARMLEDER TRK.	1925-30	30, 40, 1½, 2T	Herc. OX ⅛" O. S. Hd. for S199	4	S199 S680	V199	G266	G266
24	ARMLEDER TRK.	1925-30	50, 60, 2½, 3T	Buda EBU	4	S167	V167	G201	G201
25	ARMLEDER TRK.	1929	50-6, 60-6, 2½, 3T	Buda BUS	6	S205	V220	G253	G253
26	ARMLEDER TRK.	1926-29	55, 2½T	Cont. K4	4	S107	V107	G193	G193
27	ATTERBURY TRK.	1931-33	100, 5, 6T	Cont. 21R	6	S673	V674	G313	G314
28	ATTERBURY TRK.	1930-33	C6, 70, 4T	Cont. 20R	6	S639 ♂⅝" Stem S673 ♂$\frac{7}{16}$" Stem	V639 V674	G313 ♂$\frac{7}{16}$" I. D.	G314
29	ATTERBURY TRK.	1930-33	R6, 65, 3, 3½T	Cont. 18R	6	S639 ♂⅝" Stem S673 ♂$\frac{7}{16}$" Stem	V639 V674	G313 ♂$\frac{7}{16}$" I. D.	G314

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS							PISTON PINS				PIN BUSHINGS	
				STOCK NO.			SPECIFICATIONS									
				Alloy	Strut	Iron	Diam.	Lgth.	Comp.	Rings Used	Stock No.	Diam.	Lgth.	Type	Stock No.	No. Used
1	IS140	VS363	R134			†C891	4¾	6⅞	3⅝	4-1/4	P891	1.500	4⅝	S	PB736	4
				Sleeve Assembly SA2 Sleeve Assembly to change to 5" Bore SA31.												
2	IS162	VS365	R156			C891 ♂ High Comp.	4¾	6⅞	3⅝	4-1/4	P891	1.500	4⅝	S	PB736	4
				Sleeve Assembly SA2												
3	IS129					†C911	6¾	8⅜	4	4-5/16	P911	1.750	6 11/16	F	PB738	4
4	IS129					†C910	6½	8⅜	4 3/16	4-5/16	P909	1.750	6 3/32	F	PB738	4
5	IS129					†C909	6½	8⅜	4⅜	3-3/8	P909	1.750	6 3/32	F	PB738	4
6						†C908(B)	4⅛	5⅛	2¼	3-1/4	P785	1.125	3⅝	O		
7	IS104	VS343	R28			†C640(B)	3½	3 11/16	2 5/16	3-3/16	P719	.740	3 3/16	O		
8	IS111	VS205	R14			†C313(B)	4	4⅞	2 5/16	3-1/4	P040	1.375	3½	O	PB586	8
9	IS121					†C447	4¼	6¼	2⅞	3-1/4	P638	1.250	3¾	S		
10	IS143	VS242	R7			†C721	3¾	4⅜	2⅛	4-3/16	P721	1.375	3	F	PB589	6
11	IS156	VS236	R6			†C898	4½	6¼	3	4-1/4	P898	1.625	3¾	F		
12						†C426	4¾	6¼	2⅞	3-1/4	P639	1.250	4⅛	S		
13	IS103	VS33	R1			†C478	3⅛	3½	1 13/16	4-1/8	P307	.875	2⅞	S	PB551	6
						†C500	3⅛	3½	1⅞	4-1/8	P244	.750	2¾	O		
14	IS103	VS33	R1			†C451	3¼	3½	1 13/16	3-3/16	P307	.875	2⅞	S	PB551	6
				L360			3¼	3¾	1 13/16	2-1/8, 1-3/16	P307	.875	2⅞	S	PB551	6
15	IS130	VS334	R146													
16	IS109	VS334	R146			†C811(B)	4⅛	4 9/16	2 5/16	4-3/16	P785	1.125	3⅝	O		
17	IS130	VS334	R146			†C818(B)	4⅝	4⅞	2 5/16	4-3/16	P818	1.250	4 5/16	O		
18	IS165	VS231	R12		†L389	C596	3⅝	3 11/16	2 5/16	3-1/8, 1-5/32	P594	.859	2⅞	F	PB600	6
19	IS130	VS334				†C786(B)	4⅝	4⅞	2 5/16	4-3/16	P786	1.250	3 11/16	O	PB672	12
20	IS109	VS334	R146			†C785(B)	4	4 9/16	2 5/16	4-3/16	P785	1.125	3⅝	O		
				†L571			4	4⅜	2 5/16	3-1/8, 1-3/16	P785	1.125	3⅝	O		
21	IS109	VS334	R146			†C784(B)	3¾	4 9/16	2 5/16	4-3/16	P784	1.125	3⅜	O		
22	IS165	VS246	R7			†C604	3⅝	3⅞	1⅞	4-5/16	P604	1.125	2 13/16	F	PB621	6
23	IS111	VS205	R14			†C313(B)	4	4⅞	2 5/16	3-1/4	P040	1.375	3½	O	PB586	4
24	IS137		R6			†C109	4¼	5 1/16	2⅝	4-1/4	P080	1.125	3 11/16	S	PB517	4
25	IS130	VS236	R6			†C695	4	5	2½	4-1/4	P695	1.500	3 3/16	F	PB627	6
26	IS137	VS73	R90			†C218	4⅛	5 1/16	3⅜	4-1/4	P148	1.250	3 11/16	S	PB579	4
27	IS130	VS221 ♂ Outer In. ~~25~~ VS283				†C776	4⅜	4 13/16	2¾	3-3/16, 1-1/4	P776	1.250	3 13/32	F	PB617	6
						†C822	4⅜	5 1/16	2¾	1-3/16, 2-5/32, 1-1/4	P776	1.250	3 13/32	F	PB617	6
28	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C714	4⅛	4 13/16	2⅞	3-3/16, 1-1/4	P709	1.250	3 13/32	F	PB617	6
						†C822	4⅛	5 1/16	2⅞	2-3/16, 1-5/32, 1-1/4	P709	1.250	3 13/32	F	PB617	6
29	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C709	4	4 13/16	2 13/16	3-3/16, 1-1/4	P709	1.250	3 13/32	F	PB617	6
						†C821	4	5 5/16	2 13/16	1-3/16, 2-5/32, 1-1/4	P709	1.250	3 13/32	F	PB617	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	ATTERBURY TRK.	1929-33	29B6, K6, G6, G, 1¼, 2, 2½T	Lyc. 4SL	6	S318 卐AS855	V319	G168	G168
2	ATTERBURY TRK.	1930	A6, 1T	Lyc. WRG	6	S379	V380	G168	G168
3	ATTERBURY TRK.	1930	H6, 2½, 3, 4T	Cont. 16R	6	S639 ♂ 3/8" Stem S673 ♂ 11/32" Stem	V639 V674	 G313 ♂ 11/32" I. D.	 G314
4	ATTERBURY TRK.	1929	27R6, 2½, 3T	Lyc. TF	6	S601	V602	G166	G166
5	AUBURN	1934-36	6-52, 6-53, 6-54	Lyc. WF	6	S822	V832	G168	G379
6	AUBURN	1934-36	8-50, 8-51, 8-52	Lyc. GF	8	S822	V832	G168	G379
7	AUBURN	1932-33	8-101, 8-105 after Mtr. No. 75380	Lyc. GU	8	S822	V823	G168	G168
8	AUBURN	1931-32	8-98, 8-98A, 8-100, 8-101 to Motor 75380	Lyc. GU	8	S379	V545	G168	G168
9	AUBURN	1928-30	115, 120, 125	Lyc. 4MD	8	S318 卐AS855	V319	G168	G168
10	AUBURN	1930	8-95	Lyc. GR	8	S379	V380	G168	G168
11	AUBURN	1929-30	6-80 after Mtr. No. 19458, 6-85	Lyc. WR	6	S379	V380	G168	G168
12	AUBURN	1928-29	76, 6-80 to Mtr. No. 19458	Lyc. WS	6	S379	V380	G168	G168
13	AUBURN	1928-29	8-88, 8-90	Lyc. GS	8	S379	V380	G168	G168
14	AUBURN	1928	6-66A	Cont. 28L	6	S357	V358	G184	G184
15	AUBURN	1927	8-77	Lyc. GT	8	S379	V380	G168	G168
16	AUBURN	1925-27	6-66	Lyc. 4HM	6	S318 卐AS855	V319	G168	G168
17	AUBURN	1926	8-88	Lyc. 4HM	8	S318 卐AS855	V319	G168	G168
18	AUBURN	1925-27	4-44 Wide Groove 11/32" from end Wide Groove 11/32" from end	Lyc. CF	4	S326 ♂ Narrow Groove 11/32" from end S375 S51	V326 V375 V51	G166	G166
19	AUBURN	1924-25	8-63	Lyc. 2H	8	S318 卐AS855	V319	G168	G168
20	AUBURN	1923-25	6-43	Cont. 6Y	6	S44	V44	G225	G225
21	AUSTIN	1933-35	375, 475	Own	4	S816	V816	G315	G315
22	AUSTIN	1930-33	American	Own	4	S533	V533	G315	G315
23	AUTOCAR TRK.	1938	A, UA	Herc. JXB	6	S701 卐AS772	V702	G386	G386
24	AUTOCAR TRK.	1938	B, UB	Herc. JXC	6	S701 卐AS772	V702	G386	G386
25	AUTOCAR TRK.	1935-38	RH, RHT, RHD, 6 RH, 2½-9T RM, RMT	Own 315	6	S662 卐AS1000	V663	G373	G373
26	AUTOCAR TRK.	1935-38	D, DT, DF, DP, DH, UD, UDT, UDP, UDF, RL, RLS, 1TR, 2½-12T	Own 358	6	S662 卐AS1000	V663	G373	G373
27	AUTOCAR TRK.	1935-38	N, NT, NF, UN, UNT, UNF, NFS, 2TR, DH, UDF, 4DF, 6N, 6UN, 5½-11T	Own 404	6	S621 卐AS912	V621	G373	G373
28	AUTOCAR TRK.	1935-38	NFT, S, CE, T, TS, UT, US, 4N, UTS, 3TR, 4TR, 6NF, 6UNF, 6-15½T	Own 453	6	S621 卐AS912	V621	G373	G373
29	AUTOCAR TRK.	1932-34	H, HS, C, NH, TFA, CE, SE, TE, F, T, 3½-8½T	Own SCM	6	S621 卐AS912	V664	G373	G373
30	AUTOCAR TRK.	1930-34	SHS, SCHS, TEA, N, NE, NF, S, UN, US, 3½-5T	Own SCH	4-6	S621 卐AS912	V664	G373	G373
31	AUTOCAR TRK.	1930-34	A, D, DE, DF, DH, UD, 2½-4T	Own	6	S662 卐AS1000	V663	G373	G373

*Indicates 1/64" oversize stem valve also carried. (6-1-38)

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS — STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS103	VS33	R1		†L595		3¼	3 11/16	2 7/16	2-1/8, 2-5/16	P613	.875	2 13/16	O		
						C739(B)	3¼	4	2 7/16	3-1/8, 1-5/16	P613	.875	3 5/16	O	PB527	12
2	IS102	VS83	R2		L465	†C874	2⅞	3¾	2 5/16	3-1/8, 1-5/16	P612	.875	2⅝	O		
3	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C709	4	4 13/16	2 13/16	3-5/16, 1-¼	P709	1.250	3 1/16	F	PB617	6
						†C821	4	5 1/16	2 13/16	1-5/16, 2-5/16, 1-¼	P709	1.250	3 1/16	F	PB617	6
4	IS114	VS33	R72			†C678	3⅝	4⅝	2⅝	4-5/16	P678	1.125	2 11/16	S	PB562	6
5	IS102	VS83	R101		†L539		3 1/16	3¾	2 5/16	3-1/8, 1-5/16	P730	.875	2½	O		
6	IS102	VS83	R101		†L539		3 1/16	3¾	2 5/16	3-1/8, 1-5/16	P730	.875	2½	O		
7	IS102	VS315	R101		†L491		3	3¾	2 5/16	3-1/8, 1-5/16	P730	.875	2½	O		
8	IS102	VS83	R1		†L491		3	3¾	2 5/16	3-1/8, 1-5/16	P730	.875	2½	O		
9	IS103	VS83	R1		†L397		3¼	3 11/16	2 7/16	2-1/8, 2-5/16	P613	.875	2 13/16	O		
10	IS102	VS83	R1		†L465		2⅞	3¾	2 5/16	3-1/8, 1-5/16	P612	.875	2⅝	O		
11	IS102	VS83	R1		†L465		2⅞	3¾	2 5/16	3-1/8, 1-5/16	P612	.875	2⅝	O		
12	IS102	VS83	R1		†L396		2⅞	3½	1 15/16	2-1/8, 1-5/16	P612	.875	2⅝	O		
						C578(B)	2⅞	3½	1 15/16	4-1/8	P612	.875	2⅝	O		
13	IS102	VS83	R1		†L396		2⅞	3½	1 15/16	2-1/8, 1-5/16	P612	.875	2⅝	O		
						C578(B)	2⅞	3½	1 15/16	4-1/8	P612	.875	2⅝	O		
14	IS100	VS251	R12			†C472	2⅞	3 5/16	1 31/32	2-1/8, 1-5/16	P701	.734	2 11/32	F	PB552	6
15	IS102	VS83	R1		†L417		2¾	3⅝	1 15/16	2-1/8, 1-5/16	P359	.875	2¼	O		
						C575	2¾	3½	1 15/16	4-1/8	P359	.875	2¼	O		
16	IS103	VS178	R1			†C451	3¼	3½	1 15/16	3-5/16	P307	.875	2⅞	S	PB551	6
				L360			3¼	3¾	1 15/16	2-1/8, 1-5/16	P307	.875	2⅞	S	PB551	6
17	IS103	VS178	R1			†C451	3¼	3½	1 15/16	3-5/16	P307	.875	2⅞	S	PB551	6
				L360			3¼	3¾	1 15/16	2-1/8, 1-5/16	P307	.875	2⅞	S	PB551	6
18		VS47		†L127		C310	3⅝	4⅛	2⅛	4-1/8	P157	1.125	2⅞	F		
			R26													
19	IS103	VS33	R1			†C478	3⅛	3½	1 15/16	4-1/8	P307	.875	2⅞	S	PB551	8
						†C500	3⅛	3½	1 7/8	4-1/8	P244	.750	2¾	O		
20	IS127	VS20	R12			†C213	3⅛	3¼	1 15/16	3-5/16	P092	.750	2¾	O		
21		VS302		†L532			2.2	1 31/32	31/32	2-5/32, 1-1/16	P715	.4998	1 1/16	O		
22		VS302		†L480			2.2	1 15/16	7/8	3-5/32	P715	.4998	1 1/16	O		
23	IS131	VS353	R126	†L562 Aerotype			3⅝	4 3/16	2 3/16	3-1/8, 1-5/16	P845	1.000	3 5/32	O		
						C845(B)	3⅝	4⅜	2 3/16	3-1/8, 1-5/16	P845	1.000	3 5/32	O		
24	IS131	VS353	R126	†L563 Aerotype			3¾	4 1/16	2 1/16	3-1/8, 1-5/16	P813	1.000	3 3/16	O		
						C813(B)	3¾	4 1/16	2 1/16	3-1/8, 1-5/16	P813	1.000	3 3/16	O		
25	IS159		R25								P276	1.125	3 13/32	F		
26	IS159		R25								P276	1.125	3 13/32	F		
27	IS130		R25			C789	4¼	5¾	3⅝	3-5/32, 1-5/16	P131	1.125	3 11/32	F	PB682	6
28	IS130		R25			C788	4½	5 13/16	3⅝	3-5/32, 1-5/16	P697	1.125	3 13/32	F	PB682	6
				L640 Aerotype			4½	5¾	3⅝	3-1/8, 1-5/16	P697	1.125	3 11/32	F	PB682	6
29	IS130	VS429	R25			†C788	4½	5 13/16	3⅝	3-5/32, 1-5/16	P697	1.125	3 13/32	F	PB682	6
				L640 Aerotype			4½	5¾	3⅝	3-1/8, 1-5/16	P697	1.125	3 11/32	F	PB682	6
30	IS130	VS429	R25			†C789	4¼	5¾	3⅝	3-5/32, 1-5/16	P131	1.125	3 11/32	F	PB682	4-6
31	IS144	VS429	R25	L499 Aerotype			4	4⅞	3	3-1/8, 1-5/16	P276	1.125	3 13/32	F	PB682	6

(B) = Piston is bushed.
S = Set Screw type piston pin.
† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum, plugged piston pin.
O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES Exhaust	VALVES Intake	VALVE GUIDES Exh.	VALVE GUIDES Int.
1	AUTOCAR TRK.	1928-30	H, HS, M, S, 3½, 5T	Own	4-6	S137	V137	G223	G223
2	AUTOCAR TRK.	1929	SH, TA, TAS, S, 3½, 5T	Herc. YXA	6	S619	V619	G267	G266
				Slotted Stem*		♂Drilled Stem S659	V659		
3	AUTOCAR TRK.	1928-29	M, 5T	Own	4	S621 卐AS912	V621	G373	G373
4	AUTOCAR TRK.	1919-28	27H, 26UB, 27K, 26M, S, 6T	Own	4	S137	V137	G223	G223
5	AUTOCAR TRK.	1920-22	26Y, 26U, 28H, S, 3½, 5T	Own	4	S136	V136		
6	AVERY COMBINE	1930-35	E, 10-12 Cut	Herc. OOC	4	S735	V736	G386	G386
				Slotted Stem*		♂Drilled Stem S701 卐AS772	V702		
7	AVERY COMBINE	1929-35	B, 10-12 Cut	Herc. OX	4	S199	V199	G266	G266
				⅛" O.S. Hd. for S199*		S680			
8	AVERY COMBINE		L, 10-12 Cut	Herc. OOB	4	S735	V736	G386	G386
				Slotted Stem*		♂Drilled Stem S701 卐AS772	V702		
9	BATES STEEL MULE TRACTOR	1932-38	35	Wauk. MZ	6	S712	V612	G413	G413
10	BATES STEEL MULE TRACTOR	1932-38	45, 50	Wauk. SRK	6	S722 卐AS752	V722	G330	G331
11	BATES STEEL MULE TRACTOR	1929-38	80, Ind. 80	Wauk. JK	4	S686	V686		
12	BATES STEEL MULE TRACTOR	1924-31	40, 30-40, 45	Wauk. EU	4	S126 卐AS730	V126	G210	G209
				⅛" O. S. Hd. for S126*		S660			
				S126 with ½" Stem*		S711			
13	BATES STEEL MULE TRACTOR	1922-29	F, 18-25, H, 15-25	Mid. 402	4	S266	V267	G354	G354
14	BATES STEEL MULE TRACTOR	1922-24	G, 18-25, 25-35	Mid. 400	4	S163	S163		
15	BATES STEEL MULE TRACTOR	1923	40, 30-40	Mid. 399	4	S163	S163		
16	BEAVER MOTOR	1922-29	JA, JB	Own	4	S119	S119		
17	BEST TRACTOR	1920-26	30, 20-30 (Early)	Own	4	S239	V240	G234	G234
				Double Groove*					
18	BEST TRACTOR	1926-27	30, 20-30 (Late)	Own	4	S239	V240	G234	G234
				Double Groove*					
19	BEST TRACTOR	1920-26	60	Own	4	S231	V232	G233	G233
				Double Groove*					
20	BLACKHAWK	1929-30	L8	Cont. 15S	8	S432	V433	G258	G258
21	BLACKHAWK	1928-29	L6	Stutz	6	S359	V359	G169	G170
22	BROCKWAY TRK.	1935-38	150X, 160X, 165X, 180XSBT, 3½-7½T	Cont. 32B	6	S775	V776		
23	BROCKWAY TRK.	1935-38	125X, 145, 3-4T	Cont. 31B	6	S639	V639	G313	G314
				Single Groove 1/16" Stem 45° Seat*		♂3/8" Stem 45° Seat S673	V674	♂1/16" I.D.	
				Single Groove 1/16" Stem 60° Seat*		S1015	V776		
				Double Groove 1/16" Stem 60° Seat*		S1016 卐AS1017	V1018		
				Aerotype for S1016*					
24	BROCKWAY TRK.	1935-38	96, 110, 130, 130PS, 2½-4½T	Cont. 29B	6	S775	V776		
25	BROCKWAY TRK.	1932-38	175C, 220C, 175X, 220X, 3-10T	Cont. 34B	6	S639	V639	G313	G314
				Single Groove 1/16" Stem 45° Seat*		♂3/8" Stem 45° Seat S673	V674	♂1/16" I.D.	
				Single Groove 1/16" Stem 60° Seat*		S1015	V776		
				Double Groove 1/16" Stem 60° Seat*		S1016 卐AS1017	V1018		
				Aerotype for S1016*					
26	BROCKWAY TRK.	1930-38	195, 220, 250, 170C, 195C, 170X, 195X, 4-7½T	Cont. 33B	6	S639	V639	G313	G314
				Single Groove 1/16" Stem 45° Seat*		♂3/8" Stem 45° Seat S673	S674	♂1/16" I.D.	
				Single Groove 1/16" Stem 60° Seat*		S1015	V776		
				Double Groove 1/16" Stem 60° Seat*		S1016 卐AS1017	V1018		
				Aerotype for S1016*					

*Indicates 1/32" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS130		R24	†L459 Aerotype			4¼	5¼	3	3-$\frac{5}{32}$	P131	1.125	3$\frac{21}{32}$	F	PB555	4-6
2	IS130			*Replace in sets, always. If one valve is "shot," the others soon will be*												
3	IS130	VS29	R25			†C495	4½	5¼	2¼	3-¼	P697	1.125	3$\frac{23}{32}$	F	PB555	4
4	IS130		R24			†C224	4	5¼	2¼	3-¼	P276	1.125	3$\frac{13}{32}$	F	PB555	4
5	IS130					†C225	4¼	5¼	2¼	3-¼	P131	1.125	3$\frac{21}{32}$	F	PB555	4
6	IS106	VS353	R126			†C844(B)	4	4$\frac{5}{16}$	2⅛	3-⅛, 1-$\frac{3}{16}$	P677	1.000	3⅝	O		
7	IS111	VS205	R14			†C313(B)	4	4⅞	2$\frac{5}{16}$	3-¼	P040	1.375	3½	O	PB586	8
8	IS106	VS353	R126	L563 Aerotype		†C813(B)	3¾ 3¾	4⅛ 4⅛	2⅛ 2⅛	3-⅛, 1-$\frac{3}{16}$ 3-⅛, 1-$\frac{3}{16}$	P813 P813	1.000 1.000	3⅜ 3⅝	O O		
9	IS136	VS359	R28			†C905(B)	4¼	4⅜	2$\frac{11}{32}$	3-⅛, 1-$\frac{3}{16}$	P677	1.000	3⅝	O		
10	IS106	VS373	R28	L569 Aerotype			4⅝	5¼	2⅞	3-$\frac{5}{32}$, 1-$\frac{3}{16}$	P877	1.375	4$\frac{11}{32}$	AP	PB730	6
11	IS129															
12	IS121					†C145(B)	5	6½	3⅜	3-¼	P159	1.375	4$\frac{7}{16}$	O		
13						†C908(B)	4⅛	5⅛	2¼	3-¼	P785	1.125	3⅝	O		
14						†C214(B)	4½	5⅜	2$\frac{5}{16}$	4-¼	P556	1.250	4	O		
15																
16	IS133															
17	IS128	VS354	R135			†C355	4¾	5$\frac{15}{32}$	3¼	5-¼	P337	1.750	3$\frac{11}{16}$	F	PB561	4
18	IS128	VS354	R135			†C476	4¾	6	3¾	5-¼	P337	1.750	3$\frac{11}{16}$	F	PB561	4
19	IS129	VS344	R120			†C452	6½	7½	4¼	5-¼	P338	2.125	5$\frac{9}{16}$	F	PB560	4
20	Out. VS202 In. VS255				†L399		3	3⅝	2⅛	3-⅛, 1-$\frac{3}{16}$	P615	.859	2$\frac{15}{32}$	F	PB634	8
21	IS107	VS200														
22																
23	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13 R159			†C709	4	4$\frac{23}{32}$	2$\frac{27}{32}$	3-$\frac{5}{16}$, 1-¼	P709	1.250	3$\frac{13}{32}$	F	PB617	6
						†C821	4	5$\frac{5}{32}$	2$\frac{31}{32}$	1-$\frac{3}{16}$, 2-$\frac{5}{32}$, 1-¼	P709	1.250	3$\frac{13}{32}$	F	PB617	6
24																
25	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13 R159			†C776	4$\frac{5}{16}$	4$\frac{13}{16}$	2¾	3-$\frac{5}{16}$, 1-¼	P776	1.250	3$\frac{21}{32}$	F	PB617	6
						†C823	4⅝	5$\frac{3}{16}$	2¾	1-$\frac{3}{16}$, 2-$\frac{5}{32}$, 1-¼	P776	1.250	3$\frac{21}{32}$	F	PB617	6
26	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13 R159			†C714	4⅛	4$\frac{13}{16}$	2⅞	3-$\frac{5}{16}$, 1-¼	P709	1.250	3$\frac{13}{32}$	F	PB617	6
						†C822	4⅛	5$\frac{1}{16}$	2⅞	2-$\frac{5}{16}$, 1-$\frac{5}{32}$, 1-¼	P709	1.250	3$\frac{13}{32}$	F	PB617	6

(B) = Piston is bushed.
S = Set Screw type piston pin.
† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.
O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Br-Bu Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	BROCKWAY TRK.	1930-38	120, 121, 140, 141, 120C, 140C, 2½-4T	Cont. 30B	6	S639	V639		
						♂⅜" Stem 45° Seat			
				Single Groove 1/16" Stem 45° Seat*		S673	V674	G313	G314
				Single Groove 1/16" Stem 60° Seat*		S1015	V776	♂1/16" I.D.	
				Double Groove 1/16" Stem 60° Seat*		S1016	V1018		
				Aerotype for S1016		卐AS1017			
2	BROCKWAY TRK.	1932	150C, 2½-3½T	Cont. E600	6	S775	V776		
3	BROCKWAY TRK.	1932-34	80, 80C, 1½, 2T	Cont. 26B	6	S546	V392	G229	G229
4	BROCKWAY TRK.	1933-38	90, 100, 100C, 87, 90X, 2, 3T	Cont. 28B	6	S391	V392	G229	G229
5	BROCKWAY TRK.	1932-33	80, 80C, 1½, 2T	Cont. 25A	6	S546	V392	G229	G229
6	BROCKWAY TRK.	1930-33	64, 65, 74, 75, 90C, 92C	Cont. 27B	6	S641	V344	G184	G184
7	BROCKWAY TRK.	1930-31	KW	Wisc. H	6	S291	V291		
8	BROCKWAY TRK.	1927-31	S, E, 1½, 2T	Wisc. SU	4	S234	V234	G328	G328
						♂Short Stem			
				Long Stem*		S120	V120		
9	BROCKWAY TRK.	1924-30	E7, EY, SY, SW	Wisc. Y	6	S255	V255	G328	G328
10	BROCKWAY TRK.	1926-29	T, RT, 5T	Cont. B7	4	S129	V129	G193	G193
11	BROCKWAY TRK.	1921-29	KR, R12, 3, 3½, 4T	Cont. L4	4	S101	V101	G193	G193
						♂Grooved Stem			
				Taper Grooved Stem*		S608	V608		
12	BROCKWAY TRK.	1919-29	K, T6, 2½, 5T	Cont. K4	4	S107	V107	G193	G193
13	BROCKWAY TRK.	1927	BT, 7½T	Buda BTU	4	S221	V221	G203	G203
14	BROCKWAY BUS	1932	170B, 195B, 25-29 Pass.	Cont. 33B	6	S673	V674	G313	G314
15	BROCKWAY BUS	1930	I, 40 Pass.	Wisc. Z	6	S644	V644		
16	BROCKWAY BUS	1930	90B, 16 Pass.	Cont. 16C	6	S641	V344	G225	G225
17	BROCKWAY BUS	1929	JFB, 16-29 Pass.	Wisc. F	6	S672	V672	G307	G307
18	BROCKWAY BUS	1928-30	J3, J6, 25 Pass.	Cont. 6B	6	S287	V287	G189	G189
						♂Grooved Stem			
				Taper Grooved Stem*		S288	V288		
19	BUDA MOTOR		FR, FRB, FRH	Own	4	S221	V221		
20	BUDA MOTOR		FTU	Own	4	S167	V167	G200	G200
21	BUDA MOTOR		GF6	Own	6	S260	V261		
22	BUDA MOTOR		K325	Own	6	S706	V707	G396	G397
23	BUDA MOTOR		KT281	Own	4	S110	V110	G197	G197
24	BUDA MOTOR		K393, KM393	Own	6	S706	V707	G396	G397
25	BUDA MOTOR	1931-36	K428, K479, K381, K404	Own	6	S706	V707	G396	G397
26	BUDA MOTOR	1928-35	JV4, JV6	Own	4-6	S718	V718	G400	G400
27	BUDA MOTOR	1930-36	DS6, SG6, DW6 to No. 151700	Own	6	S668	V669	G236	G236
28	BUDA MOTOR	1927-36	GL6, GM6, GM572	Own	6	S260	V261		
29	BUDA MOTOR	1916-29	CBU, GBU	Own	4	S110	V110	G197	G197
30	BUDA MOTOR	1913-27	Q, QU, O, M	Own	4	S112	V112	G200	G200
31	BUDA MOTOR	1932-36	J214, JC214	Own	6	S691	V692	G398	G399
32	BUDA MOTOR	1928-34	HS, CS	Own	6	S640	V640	G240	G240
33	BUDA MOTOR	1930-36	H173, H260, HM173, HM260	Own	4-6	S696	V697	G396	G397
34	BUDA MOTOR	1916-29	DTU	Own	4	S110	V110	G197	G197
35	BUDA MOTOR	1919-28	MU	Own	4	S111	V111	G198	G198
36	BUDA MOTOR	1916-29	CU, CTU	Own	4	S110	V110	G197	G197
37	BUDA MOTOR	1919-27	WTU to 162000	Own	4	S111	V111	G198	G198

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13 R159			†C709	4	4 29/32	2 27/32	3-3/16, 1-1/4	P709	1.250	3 13/32	F	PB617	6
						†C821	4	5 9/32	2 27/32	1-3/16, 2-5/32, 1-1/4	P709	1.250	3 13/32	F	PB617	6
2	IS132	VS221				†C980	3 11/16	5 5/16	3 3/16	3-3/16, 1-1/4	P980	1.250	3 5/32	F		
3	IS103		R12		†L389	†C596	3 3/8	3 11/16	2 5/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
4	IS135	VS231	R12		†L389	C596	3 3/8	3 11/16	2 5/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
5	IS135		R12		†L389	†C596	3 3/8	3 11/16	2 5/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
6	IS165	VS231	R12		†L389	†C596	3 3/8	3 11/16	2 5/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
7	IS132	VS388	R139			†C635	4	4 1/2	2 3/4	4-3/16	P637	1.1875	3 7/16	WK	PB533	6
8	IS165	VS393				†C296	4	4 1/4	2 1/8	3-3/16	P297	1.0625	3 7/16	WK	PB565	4
9	IS165	VS277	R87			†C366	3 3/8	4	2	3-3/16	P255	1.0625	2 13/16	WK	PB563	6
10	IS156	VS70	R90			†C418	5	5 7/8	3 9/32	4-1/4	P288	1.500	4 3/16	S	PB578	4
11	IS140	VS67	R90 R91			†C158	4 1/2	5 1/16	3 5/8	4-1/4	P149	1.375	4	S	PB580	4
12	IS137	VS73	R90			†C218	4 1/8	5 1/16	3 3/8	4-1/4	P148	1.250	3 11/16	S	PB579	4
13	IS163	VS247	R6			†C265	5	6 1/16	3 1/4	4-1/4	P129	1.375	4 1/16	S	PB564	4
14	IS130	VS221				†C714	4 1/8	4 13/16	2 7/8	3-3/16, 1-1/4	P709	1.250	3 13/32	F	PB617	6
	In. ♂	VS283				†C822	4 1/8	5 1/16	2 7/8	2-3/16, 1-5/32, 1-1/4	P709	1.250	3 13/32	F	PB617	6
15	IS140	VS396 ♂ Outer				†C431	4 1/2	4 23/32	2 3/4	4-3/16	P722	1.187	3 3/32	WK	PB520	6
	In. ♂	VS397														
16	IS165	VS231	R12		†L389	†C596	3 3/8	3 11/16	2 5/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
17	IS103					†C737	3 1/4	3 3/4	2	3-3/16	P737	.937	2 23/32	WK	PB645	6
18	IS143	VS92 ♂ Outer VS108 ♂ Inner	R34 R98			†C312	3 3/4	4 1/2	2 5/8	3-3/16	P085	1.125	3 5/16	S	PB532	6
19	IS163	VS247	R6													
20	IS137	VS333	R6													
21	IS156		R6													
22	IS132										P793	1.125	3 7/16	F	PB662	6
23	IS132															
24	IS132										P971	1.250	3 7/16	F		
25	IS132															
26																
27		VS242	R7													
28	IS156		R6			†C898	4 1/2	6 1/4	3	4-1/4	P898	1.625	3 3/4	F		
29	IS132	VS256	R7													
30		VS12														
31	IS146					†C792	3 3/8	3 13/16	2	3-1/8, 1-3/16	P792	1.000	2 13/16	F	PB661	6
32	IS165	VS246	R7			†C604	3 3/8	3 7/8	1 7/8	4-3/16	P604	1.125	2 13/16	F	PB621	6
33	IS136					†C817	3 1/2	3 3/4	2	3-1/8, 1-3/16	P817	1.125	2 13/16	F	PB662	4-6
34	IS132	VS256	R7			†C54	3 1/2	5	2 1/2	3-3/16	P505	1.0625	2 13/16	S	PB515	4
35	IS165	VS106	R7			†C132	3 5/8	4 1/2	2 1/16	4-3/16	P0123	1.0625	3 1/16	S	PB515	4
36	IS132	VS256	R7			†C566	3 3/4	5	2 1/2	3-3/16	P079	1.0625	3 7/32	S	PB515	4
37	IS165	VS106	R7			†C272	3 3/4	4 1/2	2 1/16	4-3/16	P079	1.0625	3 7/32	S	PB515	4

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Bu-Bu

Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	BUDA MOTOR	1927-35	WTU after 162000	Own	4	S111	V111	G198	G198
2	BUDA MOTOR	1932-36	H199, H298	Own	4-6	S696	V697	G396	G397
3	BUDA MOTOR	1928-34	DW6 after No. 151700	Own	6	S610	V610	G236	G236
4	BUDA MOTOR		H205, HM205, HM205R, H217	Own	4	S696	V697	G396	G397
5	BUDA MOTOR	1925-27	GTU, KBU, KTU to 159334A	Own	4	S110	V110	G197	G197
6	BUDA MOTOR	1920-27	BUS	Own	6	S205	V220	G253	G253
7	BUDA MOTOR	1928-33	BUS	Own	6	S205	V220	G253	G253
8	BUDA MOTOR	1928-32	KBUI	Own	4	S257		G197	G197
9	BUDA MOTOR	1928-34	KBH, KTH, KTU, KTB after 159334A	Own	4	S110	V110	G197	G197
10	BUDA MOTOR	1917-23	IU, ITU, GUE	Own	4	S108	V108	G200	G200
11	BUDA MOTOR	1934-38	K369, KM369	Own	6	S706	V707	G396	G397
12	BUDA MOTOR	1917-24	OU	Own	4	S112	V112	G200	G200
13	BUDA MOTOR	1928-36	BA6, BM6, BMA6	Own	6	S661	V220	G253	G253
14	BUDA MOTOR	1916-23	T, TU	Own	4	S112	V112	G200	G200
15	BUDA MOTOR	1917-32	EBU, ETU, EBUI, HU, HTU	Own	4	S108	V108	G200	G200
						♂ Grooved Stem			
				Taper Grooved Stem		S167	V167		
16	BUDA MOTOR	1918-23	XU, XTU	Own	4	S114	V114	G199	G199
						♂ Grooved Stem			
				Taper Grooved Stem		S115	V115	G202	G202
17	BUDA MOTOR	1915-32	YU, YTU, YBU, YR, YRA, YTH	Own	4	S114	V114	G199	G199
						♂ Grooved Stem			
				Taper Grooved Stem		S115	V115	G202	G202
18	BUDA MOTOR	1922-27	ATU	Own	4	S221	V221	G203	G203
19	BUDA MOTOR	1922-32	BTU, BBU	Own	4	S221	V221	G203	G203
20	BUDA MOTOR	1928-36	JH4, JH6	Own	4-6	S718	V718	G400	G400
21	BUICK	1938	40, Special	Own	8	S837	V944	G384	G384
22	BUICK	1938	60, Century; 80, Roadmaster; 90, Limited	Own	8	S881	V945	G407	G407
23	BUICK	1937	37-40	Own	8	S837	V944	G384	G384
24	BUICK	1937	37-60, 37-80, 37-90	Own	8	S881	V945	G407	G407
25	BUICK	1936	36-40	Own	8	S837	V838	G384	G384
26	BUICK	1936	36-60, 36-80, 36-90	Own	8	S881	V531	G407	G407
27	BUICK	1934-35	34-40, 35-40	Own	8	S837	V838	G384	G384
28	BUICK	1933-35	33-80, 33-90, 34-90, 35-90	Own	8	*S530	*V531	G303	G304
						卐AS864			
29	BUICK	1934-35	34-60, 35-60	Own	8	*S528	*V529	G303	G304
30	BUICK	1934-35	34-50, 35-50	Own	8	*S526	*V527	G302	G302

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS — STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS165	VS106	R7			†C927	3 5/16	4 1/2	2 1/16	4-1/16	P721	1.375	3	F	PB589	4
2	IS136					†C792	3 3/4	3 3/4	2	3-1/16, 1-3/16	P793	1.125	3 7/32	F	PB662	4-6
3	IS128	VS242	R7			†C721	3 3/4	4 5/8	2 1/8	4-3/16	P721	1.375	3	F	PB589	6
4	IS136					†C794	3 13/16	3 3/4	2	3-1/16, 1-3/16	P793	1.125	3 7/32	F	PB662	4
5	IS132	VS256	R7			†C425	4	5	2 1/2	4-1/4	P326	1.0625	3 5/8	S	PB515	4
6	IS130	VS236	R6			†C387	4	5	2 1/2	4-1/4	P250	1.125	3 5/8	S	PB573	6
7	IS130	VS236	R6			†C695	4	5	2 1/2	4-1/4	P695	1.499	3 13/64	F	PB627	6
8	IS132	VS256	R7			†C695	4	5	2 1/2	4-1/4	P695	1.499	3 13/64	F	PB627	4
9	IS132	VS256	R7			†C695	4	5	2 1/2	4-1/4	P695	1.499	3 13/64	F	PB627	4
10	IS137	VS37	R7			†C170	4	5 3/8	2 3/8	4-1/4	P506	1.125	3 7/16	S	PB517	4
11	IS132					†C971	4 1/16	4 5/8	2 1/4	3-1/16, 1-3/16	P971	1.250	3 7/16	F		
12		VS12				†C113	4 1/8	5 1/4	2 3/16	3-1/4	P082	1.0625	3 9/16	S		
13	IS130	VS236	R6			†C795	4 1/8	5	2 1/2	4-1/4	P795	1.500	3 5/16	F	PB627	6
14		VS12				†C108	4 1/4	5 3/8	2 3/16	3-1/4	P189	1.0625	3 1/16	S		
15	IS137	VS333	R6			†C109	4 1/4	5 5/16	2 5/8	4-1/4	P080	1.125	3 1/16	S	PB517	4
16	IS121		R7			†C308	4 1/4	6 1/4	3	4-1/4	P507	1.250	3 5/8	S	PB521	4
17	IS121	VS102	R7			†C210	4 1/2	6 3/16	3	4-1/4	P081	1.250	3 1/16	S	PB521	4
18	IS163	VS247	R6			†C262	4 3/4	6 7/16	3 1/4	4-1/4	P128	1.375	4 1/16	S	PB564	4
19	IS163	VS247	R6			†C265	5	6 7/16	3 1/4	4-1/4	P129	1.375	4 5/16	S	PB564	4
20						†C825	6	6 7/8	3 1/4	4-1/4	P825	2.000	5 1/8	F		
21	IS158	VS398 ♂ Outer In. VS399	R125	†L635 Cam Ground Type			3 3/32	4 3/32	2 1/64	1-1/16, 1-3/32, 2-1/16	P676	.8125	2 1/16	O		
22	IS101	VS398 ♂ Outer In. VS399	R125	†L636 Cam Ground Type			3 7/16	4 7/16	2 33/64	1-1/16, 1-3/32, 2-1/16	P938	.875	3 1/16	O		
23	IS158	VS398 ♂ Outer In. VS399	R125	†L607 ♂ Cam ground type but has cast relief and may be round ground.			3 3/32	3 13/16	2 1/4	2-3/32, 2-1/16	P676	.8125	2 1/16	O		
24	IS101	VS398 ♂ Outer In. VS399	R125	†L608 ♂ Cam ground type but has cast relief and may be round ground.			3 7/16	4 3/32	2 5/16	2-3/32, 2-1/16	P938	.875	3 1/16	O		
25	IS158	VS367 ♂ Outer In. VS368	R125	†L564 ♂ Cam ground type but has cast relief and may be ground round.			3 3/32	3 13/16	2 1/4	2-1/16, 2-3/32	P676	.8125	2 1/16	O		
26	IS101	VS367 ♂ Outer In. VS368	R125	†L565 ♂ Cam ground type but has cast relief and may be round ground.			3 7/16	4 3/32	2 5/16	2-1/16, 2-3/32	P683	.875	2 31/32	O		
27	IS158	VS310 ♂ Outer In. VS140 Lift. VS340	R5			†C832(B)	3 3/32	3 13/16	2 1/4	2-1/16, 2-3/32	P676	.8125	2 1/16	O	PB624	16
				L564 ♂ Cam ground type but has cast relief and may be round ground.			3 3/32	3 13/16	2 1/4	2-1/16, 2-3/32	P676	.8125	2 1/16	O		
28	IS108	VS310 ♂ Outer In. VS311 Lift. VS196	R5			†C803(B)	3 5/16	3 23/32	2 5/16	2-1/16, 2-3/32	P641	.875	2 31/32	O	PB660	16
29	IS101	VS310 ♂ Outer In. VS311 Lift. VS196	R5			†C832(B)	3 3/32	3 13/16	2 1/4	2-1/16, 2-3/32	P676	.8125	2 1/16	O	PB624	16
				L564			3 3/32	3 13/16	2 1/4	2-1/16, 2-3/32	P676	.8125	2 1/16	O		
30	IS100	VS310 ♂ Outer In. VS319 Lift. VS340	R110			†C831(B)	2 31/32	3 1/32	2 3/32	2-1/16, 2-3/32	P765	.749	2 17/32	O	PB694	16

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Bu-Bu

Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	BUICK	1933	33-60	Own	8	*S528	*V529	G303	G304
2	BUICK	1933	33-50	Own	8	*S526	*V527	G302	G302
3	BUICK	1932	32-50	Own	8	*S526	*V527	G302	G302
4	BUICK	1931-32	8-60, 32-60	Own	8	*S528	*V529	G303	G304
5	BUICK	1931-32	8-80, 8-90, 32-80, 32-90	Own	8	*S530 卐AS864	*V531	G303	G304
6	BUICK	1931	8-50	Own	8	*S526	*V527	G302	G302
7	BUICK	1930	Standard Six, 40	Own ⅛" O. S. Hd. for S436	6	*S436 AS739 S487	*V436	G132	G133
8	BUICK	1930	Master Six, 50, 60	Own ⅛" O. S. Hd. for S437 ⅛" O. S. Hd. for V438	6	*S437 AS853 卐AS880 S488	*V438 V489	G136	G137
9	BUICK	1929	Standard Six, 116	Own ⅛" O. S. Hd. for S436	6	*S436 AS739 S487	*V436	G132	G133
10	BUICK	1929	Master Six, 121, 129	Own ⅛" O. S. Hd. for S437 ⅛" O. S. Hd. for V438	6	*S437 AS853 卐AS880 S488	*V438 V489	G136	G137
11	BUICK	1928	Standard Six, 115	Own	6	*S397	*V397	G130	G131
12	BUICK	1928	Master Six, 120, 128	Own ⅛" O. S. Hd. for S398 ⅛" O. S. Hd. for V399	6	*S398 S455	*V399 V456	G134	G135
13	BUICK	1927	Standard Six	Own ⅛" O. S. Hd. for S87	6	*S87 S451	*V87	G130	G131
14	BUICK	1927	Master Six	Own	6	S81	*V82	G134	G135
15	BUICK	1926	Standard Six	Own ⅛" O. S. Hd. for S87	6	*S87 S451	*V87	G130	G131

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS101	VS310 ♂ Outer VS311 ♂ Inner	R5			†C802(B)	3 1/16	3 13/16	2 1/4	2-3/16, 2-5/32	P676	.8125	2 11/16	O	PB624	16
2	IS100	VS310 ♂ Outer VS319 ♂ Inner	R110			†C801(B)	2 15/16	3 1/2	2 3/32	2-3/16, 2-5/32	P765	.749	2 17/32	O	PB694	16
3	IS100	VS298 ♂ Outer VS299 ♂ Inner	R110			†C765(B) C801(B)	2 15/16 2 15/16	3 1/2 3 1/2	2 3/32 2 3/32	2-3/16, 1-3/16 2-3/16, 2-5/32	P765 P765	.749 .749	2 17/32 2 17/32	O O	PB694 PB694	16 16
4	IS101	VS169 ♂ Outer VS140 ♂ Inner	R5			†C712(B) C802(B)	3 1/16 3 1/16	3 13/16 3 13/16	2 1/4 2 1/4	2-3/16, 1-3/16 2-3/16, 2-5/32	P676 P676	.8125 .8125	2 11/16 2 11/16	O O	PB624 PB624	16 16
5	IS108	VS169 ♂ Outer VS140 ♂ Inner	R5			†C713(B) C803(B)	3 5/16 3 5/16	3 23/32 3 23/32	2 5/16 2 5/16	2-3/16, 1-3/16 2-3/16, 2-5/32	P641 P641	.875 .875	2 25/32 2 25/32	O O	PB660 PB660	16 16
6	IS100	VS298 ♂ Outer VS299 ♂ Inner	R110			†C711(B)	2 7/8	3 1/2	2 3/32	2-3/16, 1-3/16	P711	.7485	2 15/32	O	PB543	16
7	IS112	VS169 ♂ Outer VS140 ♂ Inner VS196 ♂ Lifter	R5			†C683(B)	3 7/16	3 31/32	2 11/32	2-3/16, 1-3/16	P683	.875	2 31/32	O	PB527	12
8	IS113	VS169 ♂ Outer VS140 ♂ Inner VS196 ♂ Lifter	R5			†C684(B)	3 3/4	4 1/16	2 1/4	2-3/16, 1-3/16	P684	.9375	3 3/32	O	PB650	12
9	IS112	VS169 ♂ Outer VS140 ♂ Inner VS196 ♂ Lifter	R5			†C641(B)	3 5/16	3 31/32	2 11/32	2-3/16, 1-3/16	P641	.875	2 25/32	O	PB608	12
10	IS113	VS169 ♂ Outer VS140 ♂ Inner VS196 ♂ Lifter	R5			†C642(B)	3 5/8	4 1/16	2 1/4	2-3/16, 1-3/16	P642	.937	3 3/16	O	PB609	12
11	IS108	VS169 ♂ Outer VS140 ♂ Inner VS196 ♂ Lifter	R5	L429		†C467(B)	3 1/8 3 1/8	3 3/4 3 3/4	2 3/16 2 3/16	3-1/8 3-1/8	P260 P260	.750 .750	2 11/16 2 11/16	O O	PB543	12
12	IS113	VS169 ♂ Outer VS140 ♂ Inner VS196 ♂ Lifter	R5		L386	†C468(B)	3 1/2 3 1/2	3 13/16 4 1/16	2 3/16 2 3/16	2-3/16, 1-3/16 3-3/16, 1-3/16	P259 P259	.875 .875	3 1/16 3 1/16	O O	PB527	12
13	IS108	VS142 ♂ Outer VS124 ♂ Inner VS133 ♂ Lifter	R5	L429		†C467(B)	3 1/8 3 1/8	3 3/4 3 3/4	2 3/16 2 3/16	3-1/8 3-1/8	P260 P260	.750 .750	2 11/16 2 11/16	O O	PB543	12
14	IS113	VS142 ♂ Outer VS124 ♂ Inner VS133 ♂ Lifter	R5		L386	†C468(B)	3 1/2 3 1/2	3 13/16 4 1/16	2 3/16 2 3/16	2-3/16, 1-3/16 3-3/16, 1-3/16	P259 P259	.875 .875	3 1/16 3 1/16	O O	PB527	12
15	IS108	VS142 ♂ Outer VS124 ♂ Inner VS133 ♂ Lifter	R5			†C428(B)	3 1/8	3 13/16	2 1/4	3-1/8	P260	.750	2 11/16	O	PB543	12

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Bu-Ca

Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	BUICK	1926	Master Six	Own	6	S81	*V82	G134	G135
2	BUICK	1925	Standard Six	Own	6	*S87	*V87	G129	G129
				1/8" O. S. Hd. for S87		S451			
3	BUICK	1924 25	41-55, Master Six	Own	6	S81	*V82	G135	G135
4	BUICK	1922-23	R, O, 49S	Own	6	S12	V13	G129	G129
5	BUICK	1922-23	35, 45	Own	4-6	S12	V13	G129	G129
6	BUICK	1922-24	33 to 37	Own	4	S12	V13	G129	G129
7	BUICK	1921-23	44 to 50, 54, 55	Own	6	S14	V15		
8	BUICK	1917-20	E, H, K	Own	6	S14	V15		
9	CADILLAC	1937-38	60, 65, 70, 75, 3860S, 3865, 3875	Own	8	S946	V947	G411	G411
10	CADILLAC	1937	85	Own	12	S840	V841	G310	G310
11	CADILLAC	1936	36-60	Own	8	S882	V883	G411	G411
12	CADILLAC	1936	36-70, 36-75	Own	8	S882	V883	G411	G411
13	CADILLAC	1936	36-80, 36-85	Own	12	S840	V841	G310	G310
14	CADILLAC	1934-35	370D	Own	12	S840	V841	G310	G310
15	CADILLAC	1934-35	452D	Own	16	S840	V841	G310	G310
16	CADILLAC	1934-35	355D	Own	8	S558	V559	G320	G320
17	CADILLAC	1932-33	452B, 452C	Own	16	S570	S570	G310	G310
18	CADILLAC	1932-33	370B, 370C	Own	12	S570	S570	G310	G310
19	CADILLAC	1932-33	355B, 355C	Own	8	S558	V559	G320	G320
20	CADILLAC	1930-31	452	Own	16	S515	S515	G310	G310
21	CADILLAC	1930-31	370	Own	12	S515	S515	G310	G310
22	CADILLAC	1930-31	353 after Eng. No. 5-3326, 355	Own	8	S386 AS857	V387	G271	G271
23	CADILLAC	1930	353 to Eng. No. 5-3326	Own	8	S494	V495	G271	G271
24	CADILLAC	1928-29	341	Own	8	S386 AS857	V387	G271	G271
25	CADILLAC	1926-27	314	Own	8	S342	V19	G149	G149
26	CADILLAC	1917-25	55, 57, 59, 61, 62	Own	8	S19	V19	G148	G148
27	CASE	1925-26	X, J, I, C	Cont. 8R	6	S2	V2	G174	G174
28	CASE	1923-26	X, Y	Cont. 6T	6	S61	V61	G189	G189
29	CASE J. I. TRAC.	1936-38	RC	Wauk. FK	4	S986	S986	G475	G475

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS113	VS142 ♂ Outer VS124 ♂ Inner VS133 ♂ Lifter	R5			†C429 (B)	3½	4¼	2 7/16	3-3/16	P259	.875	3 1/16	O	PB527	12
2	IS108	VS142 ♂ Outer VS124 ♂ Inner VS133 ♂ Lifter	R5			†C342 (B)	3	3 13/16	2¼	3-⅛	P236	.750	2 17/32	O	PB543	12
3	IS113	VS142 ♂ Outer VS124 ♂ Inner VS133 ♂ Lifter	R5			†C276 (B)	3⅝	4¼	2 7/16	3-3/16	P033	.875	2 15/16	O	PB527	12
4		VS160	R3			†C605	3⅝	4¼	2¼	4-3/16	P091	.750	3 3/32	S	PB526	6
5		VS118	R3			†C236	3⅝	3¾	2¼	3-3/16	P091	.750	3 3/32	S	PB526	4-6
6		VS118	R3			†C202	3⅝	3¾	2¼	4-3/16	P091	.750	3 3/32	S	PB526	4
7		VS160	R3			†C75	3⅝	3¾	1¾	4-3/16	P063	.968	3 1/16	S		
8		VS160	R3			†C15	3⅝	3¾	1¾	4-3/16	P034	.750	3 1/16	S		
9	IS107	VS369	R101	†L574 Cam Ground Type L594 Same as L574 except relieved for round grinding.			3½	4⅛	2 5/16	2-⅛, 2-3/16	P883	.874	3 3/32	F	PB749	8
10	IS102 In. VS348 ♂ Outer VS349		R111												PB700	12
11	IS107	VS369	R101	†L573 Cam Ground Type L593 Same as L573 except relieved for round grinding.			3⅝	4⅛	2 5/16	2-⅛, 2-3/16	P882	.874	2 15/16	F	PB724	8
12	IS107	VS369	R101	†L574 Cam Ground Type L594 Same as L574 except relieved for round grinding.			3½	4⅛	2 5/16	2-⅛, 2-3/16	P883	.874	3 3/32	F	PB724	8
13	IS102 In. VS348 ♂ Outer VS349		R111												PB700	12
14	IS102 In. VS348 ♂ Outer VS349		R111													
15	IS102 In. VS348 ♂ Outer VS349		R111													
16	IS126	VS184	R9	†L541 ♂ Cam ground type but has milled relief and may be round ground.			3⅝	3 11/16	1 11/16	3-3/16, 1-3/16	P663	.874	3 1/32	S	PB699	8
17	IS103 In. VS348	VS349	R111													
18	IS103 In. VS348	VS349	R111			†C770	3½	3 7/16	1 11/16	2-⅛, 2-3/16	P770	.875	2 15/16	S	PB700	12
19	IS126	VS184	R9			†C769	3⅝	3 11/16	1 13/16	2-1/16, 1-1/16, 1-3/32	P663	.874	3 1/32	S	PB699	8
20	IS103		R111													
21	IS103		R111			†C754	3½	3 7/16	1 11/16	2-⅛, 2-3/16	P323	.749	2 15/16	S	PB658	12
22	IS126	VS184	R9			†C692	3⅝	3⅝	1½	2-⅛, 2-3/16	P663	.874	3 1/32	S	PB597	8
23	IS165	VS184	R9			†C692	3⅝	3⅝	1½	2-⅛, 2-3/16	P663	.874	3 1/32	S	PB597	8
24	IS126	VS184	R9			†C595 †C841	3 1/16 3 1/16	3 11/16 3⅝	1 11/16 1½	3-3/16 2-⅛, 2-3/16	P663 P663	.874 .874	3 1/32 3 1/32	S S	PB598 PB598	8 8
25	IS165	VS207	R9	Skirt Ring L429		†C503 †C685	3 1/16 3 1/16 3 1/16	3 11/16 3 11/16 3⅝	1 13/16 1 13/16 2	3-3/16 3-3/16 3-⅛, 1-3/16	P323 P323 P323	.749 .749 .749	2 15/16 2 15/16 2 15/16	S S S	PB510 PB510 PB510	8 8 8
26		VS155	R9			†C49	3 1/16	3⅝	1 7/16	3-3/16	P323	.749	2 15/16	S	PB510	8
27	IS165	VS19	R31			†C245	3⅝	4 1/16	2 7/16	3-3/16	P0119	.860	3	S	PB503	6
28		VS19	R34			†C288	3⅝	4⅜	2½	3-3/16	P519	1.125	3 3/16	S	PB532	6
29		VS420	R38			†C966	3¼	3½	1¾	2-⅛, 1-3/16	P943	.875	2 11/16	F	PB751	4

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	CASE J. I. TRAC.	1929-35	C, CC, CI, CO, 17-27	Own	4	S758	S758	G401	G401
2	CASE J. I. TRAC.	1929-32	L, 26-40, LI, LO	Own	4	S724	V724	G363	G363
3	CASE J. I. TRAC.	1919-30	20-36, 22-40, 25-45	Own	4	S719	V719	G362	G362
4	CASE J. I. TRAC.	1920-29	12-20, 12-20A	Own	4	S130	V130	G364	G364
5	CASE J. I. TRAC.	1918-29	15-27, 18-32, K	Own	4	S275	V275	G365	G365
6	CASE COMBINE		W, Hillside 14-16 Cut	Own	4	S130	V130	G364	G364
7	CASE COMBINE		H, Prairie 10-12-15 Cut	Wauk. V	4	S611	V611	G326	G327
8	CASE COMBINE		A Prairie 8-10 Cut, B Prairie 8-10-12 Cut, No. 9	Wauk. XA	4	S290	V290	G368	G369
9	CASE COMBINE		P, Prairie, 12-16-20 Cut	Own	4	S758	S758	G401	G401
10	CATERPILLAR TRACTOR	1936-38	Diesel, RD4	Own	4	卐AS1004	V1005	G485	G485
11	CATERPILLAR TRACTOR	1937-38	Diesel, RD6, RD7, RD8	Own	3-4-6	S963	V964	G462	G462
12	CATERPILLAR TRACTOR	1934-37	Diesel, 40, 50, 75 Valve assembly consists of valve, spring, spring seat and retainers to replace early valve with straight retainer groove.	Own	3-4-6	S963 ♂Taper grooved stem S963A	V964 V964A	G462	G462
13	CATERPILLAR TRACTOR	1934-36	22	Own	4	S617	V618	G449	G449
14	CATERPILLAR TRACTOR	1934-36	28	Own	4	S617	V618	G449	G449
15	CATERPILLAR TRACTOR	1932-36	50 (Gasoline Fuel)	Own	4	S926	V927	G447	G447
16	CATERPILLAR TRACTOR	1932-35	65, 70, (Gasoline Fuel)	Own	4	S915	V916	G448	G448
17	CATERPILLAR TRACTOR	1932-34	35	Own	4	S239	V240	G424	G424
18	CATERPILLAR TRACTOR	1928-34	20 (1928-31) 25 (1932-34)	Own	4	S617	V618	G423	G423
19	CATERPILLAR TRACTOR	1928-34	15 (1928-31) 20 (1932-34)	Own	4	S631	V632	G422	G422
20	CATERPILLAR TRACTOR	1928-34	10 (1928-31) 15 (1932-34)	Own	4	S629	V630	G445	G445
21	CATERPILLAR TRACTOR	1926-27	2 Ton	Own	4	S235	V235	G323	G323
22	CATERPILLAR TRACTOR	1926-34	30, 25-30	Own	4	S239	V240	G234	G234
23	CATERPILLAR TRACTOR	1926-34	60	Own	4	S231	V232	G233	G233
24	CATERPILLAR TRACTOR	1926-34	60 (6¾" Bore) 75	Own 1/16" O.S. Hd. for S231	4	S231 S675	V232	G233	G233
25	CATERPILLAR COMBINE		34, 12-15 Cut, Hillside, Prairie	Own	4	S631	V632	G422	G422
26	CATERPILLAR COMBINE		36, 16½-20 Cut, Hillside, Prairie	Own	4	S617	V618	G423	G423
27	CHANDLER	1929	8-85	Own 60° Seat	8	S402 ♂45° Seat S463	V403 V464	G230	G230
28	CHANDLER	1929	8-75	Own	8	S449	V450	G263	G263
29	CHANDLER	1928-29	65	Own	6	S457	V457	G231	G231

*Indicates 1/16" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS109	VS357	R127			†C863	3⅞	4 7/16	2 1/16	3-3/16	P863	1.233	3 7/16	O		
				Sleeve Assembly SA4												
2	IS130	VS358	R127			†C742	4⅝	5⅜	2 1/16	4-1/32	P742	1.485	4⅛	O		
				Sleeve Assembly SA7												
3	IS163															
4	IS109	VS361	R127			†C741	4⅛	4⅞	2⅝	3-3/16	P741	1.375	3⅝	O		
				Sleeve Assembly SA6												
5	IS132	VS358	R127			†C505	4½	5 3/16	2 3/16	4-¼	P12	1.375	4 3/16	S	PB733	4
				Sleeve Assembly SA5												
6	IS109	VS361	R127			†C741	4⅛	4⅞	2⅝	3-3/16	P741	1.375	3⅝	O		
				Sleeve Assembly SA6												
7	IS130	VS295	R28			†C677(B)	4	4 1/32	2 1/32	3-3/16	P677	1.000	3⅝	O		
8	IS104	VS343	R28			†C640(B)	3½	3 11/16	2 5/16	3-3/16	P719	.740	3 3/16	O		
9	IS109	VS357	R127			†C863	3⅞	4 7/16	2 1/16	3-3/16	P863	1.233	3 7/16	O		
				Sleeve Assembly SA4												
10		VS385 ♂Outer VS430 ♂Inner	R158	L643F			4¼	6⅛	3¾	4-⅛, 2-7/32	P982	1.750	3 1/16	F	PB758	4
				♂Available in standard bore, pin fit only, from Cleveland. No oversizes. Sleeve Assembly NSA48 ♂Sleeve is made of "Nitricastiron"													
11		VS386	R155	L644F			5¾	9 3/16	5 1/16	1-1/16, 3-3/32, 2-¼	P984	2.375	4 3/16	F	PB760	2-4-6
				♂Available in standard bore, pin fit only, from Cleveland. No oversizes. Sleeve Assembly NSA49 ♂Sleeve is made of "Nitricastiron"													
12		VS386	R155													
13	IS127	VS385	R136			†C916	4	4¾	2⅞	5-5/32	P916	1.218	3 1/16	F	PB642	4
14	IS127	VS385	R136			†C917	4 3/16	5¼	3 1/16	5-5/32	P917	1.500	3½	F	PB639	4
15		VS386	R137			†C918	5½	6 1/16	3 1/16	5-3/16	P918	1.937	4 3/16	F	PB739	4
16		VS387	R120			†C919	7	7 1/32	4 7/32	5-¼	P919	2.125	6⅛	F	PB560	4
17	IS128	VS383	R135			†C914	4⅞	6	3 1/32	5-3/16	P914	1.750	4 3/32	F	PB561	4
18	IS127	VS385	R136			†C745	4	5¼	3 1/16	5-⅛	P745	1.500	3 1/16	F	PB639	4
19	IS151	VS33	R15			†C744	3¾	4¾	2⅞	5-5/32	P744	1.219	3 7/32	F	PB642	4
20	IS147	VS384	R16			†C743	3⅜	4¼	2 1/16	4-5/32	P743	1.094	2 31/32	F	PB643	4
21						†C259	4	4½	2⅛	4-3/16	P342	1.250	3 1/16	F	PB651	4
22	IS128	VS354	R135			†C476	4¾	6	3¾	5-¼	P337	1.750	3 15/16	F	PB561	4
				High Comp. ☞C853			4¾	6⅝	4⅜	5-¼	P337	1.750	3 15/16	F	PB561	4
23	IS129	VS344	R120			†C452	6½	7½	4¼	5-¼	P338	2.125	5 3/16	F	PB560	4
				High Comp. ☞C852			6½	8¼	5	5-¼	P338	2.125	5 3/16	F	PB560	4
24	IS129	VS344	R120			†C807	6¾	7½	4¼	5-¼	P807	2.125	5⅞	F	PB560	4
				High Comp. ☞C915			6¾	7 15/16	4 1/16	5-¼	P807	2.125	5⅞	F	PB560	4
25	IS151	VS33	R15			†C744	3¾	4¾	2⅞	5-5/32	P744	1.219	3 7/32	F	PB642	4
26	IS127	VS385	R136			†C745	4	5¼	3 1/16	5-⅛	P745	1.500	3 1/16	F	PB639	4
27		VS235	R12			†C603(B)	3⅜	4	2⅝	2-⅛, 1-3/16	P579	.968	2¾	O		
28		VS229	R80			†C477(B)	3	3 3/32	2 7/32	2-⅛, 1-3/16	P240	.875	2⅝	O	PB608	16
29		VS249	R80			†C639(B)	3⅛	3¾	2 7/32	2-⅛, 1-3/16	P240	.875	2⅝	O	PB608	12

(B) = Piston is bushed.
S = Set Screw type piston pin.
† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.
O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES Exhaust	VALVES Intake	VALVE GUIDES Exh.	VALVE GUIDES Int.
1	CHANDLER	1926-29	Big Six	Own	6	S85	V85	G190	G190
2	CHANDLER	1928	8-85	Own	8	S402 ♂45° Seat S463	V403 V464	G230	G230
				60° Seat					
3	CHANDLER	1926-28	Standard Six	Own	6	S457	V457	G231	G231
4	CHANDLER	1927	8-85	Own	8	S402 ♂45° Seat S463	V403 V464	G230	G230
				60° Seat					
5	CHANDLER	1927	Special Six	Own	6	S310	V310	G215	G215
6	CHANDLER	1925-26	33	Own	6	S85	V85	G190	G190
7	CHANDLER	1923-24	32, 32A	Own	6	S85	V85	G190	G190
8	CHEVROLET	1938	HA, De Luxe; HB, Master	Own	6	S988 卐AS989 S988AEX	V943 V943AIN	G476	G453
9	CHEVROLET	1937	GA, GB, Master	Own	6	S942 卐AS956 S942AEX	V943 V943AIN	G452	G453
10	CHEVROLET	1936	Master FA, FD, Std. FC	Own	6	S858 卐AS896 S858AEX	V859 V859AIN	G371	G392
11	CHEVROLET	1935	Master EA, ED, Std. EC	Own	6	S858 卐AS896 S858AEX	V859 V859AIN	G371	G392
				Grooved Stem					
				Slotted Stem		S811 卐AS895 S811AEX	V812 V812AIN	G371	G393
12	CHEVROLET	1934	Master, DA	Own	6	S811 S811AEX 卐AS895	V812 V812AIN	G371	G372
13	CHEVROLET	1934	Standard, DC	Own	6	S590 S590AEX 卐AS894	V591 V591AIN	G114	G114
14	CHEVROLET	1933	Master and Standard	Own	6	S590 S590AEX 卐AS894	V591 V591AIN	G114	G114
15	CHEVROLET	1932	All	Own	6	*S556 卐AS893 S556AEX	*V557 V557AIN	G114	G114
16	CHEVROLET	1930-31	All	Own	6	*S511 卐AS892 *V511 S511AEX	*V512 V512AIN	G114	G114
17	CHEVROLET	1929	All	Own	6	*S467 S467AEX	*V467 V467AIN	G114	G114
18	CHEVROLET	1928	AA, AB	Own	4	*S395	*V395 V409		
				.003 O. S. Stem for V395					
				1/8" O. S. Head for S-V395		S461	V461		
				1/8" O. S. Head for *S395		S462			
19	CHEVROLET	1913-27	490, Superior	Own	4	*S27	*V27		
				Cupped Head for V27			V466		
				.003 O. S. Stem for V27			V361		
				1/8" O. S. Head for S-V27		S367	V367		
				1/8" O. S. Head for *S27		S360			

*Indicates 1/64" oversize stem valve also carried.
(6-1-38)

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1		VS46	R12													
2		VS235	R12			†C579(B)	3¼	4	2⅜	2-⅛, 1-$\frac{3}{16}$	P239	.968	2$\frac{11}{16}$	O		
3		VS249	R80			†C477(B)	3	3$\frac{33}{64}$	2$\frac{7}{32}$	2-⅛, 1-$\frac{3}{16}$	P240	.875	2⅝	O	PB608	12
4		VS235	R12			†C580(B)	3$\frac{3}{16}$	4¼	2⅜	2-⅛, 1-$\frac{3}{16}$	P239	.968	2$\frac{11}{16}$	O		
5		VS249	R80			†C392(B)	3⅛	4¼	2⅜	2-⅛, 1-$\frac{3}{16}$	P239	.968	2$\frac{11}{16}$	O		
6			R12			†C354(B)	3½	4½	2½	2-⅛, 1-$\frac{3}{16}$	P238	1.0937	3$\frac{1}{16}$	O		
7			R12			C556	3½	4⅛	2	2-⅛, 1-$\frac{3}{16}$	P192	.968	2$\frac{31}{32}$	F		
8		VS421	R151			†C975(B) ♂Cam ground—Tin plated	3⅜	4$\frac{11}{32}$	2.23	2-⅛, 1-$\frac{3}{16}$	P975	.865	3$\frac{13}{32}$	O	PB747	12
						C974(B) ♂Cam ground—Not plated	3⅜	4$\frac{11}{32}$	2.23	2-⅛, 1-$\frac{3}{16}$	P975	.865	3$\frac{13}{32}$	O	PB747	12
				L648 ♂T Slot—Cam ground type			3½	4$\frac{3}{32}$	2$\frac{5}{16}$	2-⅛, 1-$\frac{3}{16}$	P975	.865	3$\frac{13}{32}$	O		
9		VS328	R151			†C975(B) ♂Cam ground—Tin plated	3½	4$\frac{11}{32}$	2.23	2-⅛, 1-$\frac{3}{16}$	P975	.865	3$\frac{13}{32}$	O	PB747	12
						C974(B) Cam ground—Not plated	3½	4$\frac{11}{32}$	2.23	2-⅛, 1-$\frac{3}{16}$	P975	.865	3$\frac{13}{32}$	O	PB747	12
				L648 ♂T Slot—Cam ground type			3½	4$\frac{3}{32}$	2$\frac{5}{16}$	2-⅛, 1-$\frac{3}{16}$	P975	.865	3$\frac{13}{32}$	O		
10		VS328	R119	Tin Plated		†C900(B)	3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	2-⅛, 1-$\frac{3}{16}$	P650	.990	2$\frac{29}{32}$	O	PB623	12
						C850(B) ♂Cam ground type—Not plated.	3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	2-⅛, 1-$\frac{3}{16}$	P650	.990	2$\frac{29}{32}$	O	PB623	12
						C890(B) Same as C850 except relieved for round grinding.										
				Tin Plated		C950(B) Same as C900 except round ground.										
				L500	L450		3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	3-$\frac{5}{32}$	P650	.990	2$\frac{29}{32}$	O		
11		VS345	R119	Tin Plated		†C900 (B)	3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	2-⅛, 1-$\frac{3}{16}$	P650	.990	2$\frac{29}{32}$	O	PB623	12
						C850(B) ♂Cam Ground Type	3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	2-⅛, 1-$\frac{3}{16}$	P650	.990	2$\frac{29}{32}$	O	PB623	12
			R123			C890 Same as C850 except relieved for round grinding.										
				L500	L450		3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	3-$\frac{5}{32}$	P650	.990	2$\frac{29}{32}$	O		
12	IS146	VS328	R123	Cam Ground		†C850(B)	3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	2-⅛, 1-$\frac{3}{16}$	P650	.990	2$\frac{29}{32}$	O	PB623	12
						C890 Same as C850 except relieved for round grinding.										
				L500	L450		3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	3-$\frac{5}{32}$	P650	.990	2$\frac{29}{32}$	O		
13	IS100	VS305	R20	Cam Ground		†C850(B)	3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	2-⅛, 1-$\frac{3}{16}$	P650	.990	2$\frac{29}{32}$	O	PB623	12
						C890 Same as C850 except relieved for round grinding.										
				L500	L450		3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	3-$\frac{5}{32}$	P650	.990	2$\frac{29}{32}$	O		
14	IS100	VS284	R20	Cam Ground		†C800(B)	3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	2-$\frac{5}{32}$, 1-$\frac{3}{16}$	P650	.990	2$\frac{29}{32}$	O	PB623	12
						C889 Same as C800 except relieved for round grinding.										
				L500	L450		3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	3-$\frac{5}{32}$	P650	.990	2$\frac{29}{32}$	O		
15	IS100	VS284	R20	L500	L450	†C700(B)	3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	3-$\frac{5}{32}$	P650	.990	2$\frac{29}{32}$	O	PB623	12
						C888 Same as C700 except relieved for round grinding.										
16	IS100	VS284	R20	L500	L450	†C700(B)	3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	3-$\frac{5}{32}$	P650	.990	2$\frac{29}{32}$	O	PB623	12
						C888 Same as C700 except relieved for round grinding.										
17	IS102	VS284	R20	L500	L450	†C650	3$\frac{7}{16}$	3$\frac{11}{16}$	1⅞	3-$\frac{5}{32}$	P650	.990	2$\frac{29}{32}$	O		
						C700(B) Same as C650—Bushed					P650	.990	2$\frac{29}{32}$	O	PB623	12
						C888 Same as C700 except relieved for round grinding.										
18	IS107	VS107	R20		†L373		3$\frac{11}{16}$	3$\frac{11}{16}$	1$\frac{15}{16}$	3-$\frac{5}{32}$	P644	.850	3$\frac{5}{16}$	O		
						C62	3$\frac{11}{16}$	3$\frac{5}{8}$	1⅞	3-$\frac{3}{16}$	P644	.850	3$\frac{5}{16}$	O		
						C327(B) Same as C62—Bushed										
						C507 Skeleton Type										
19	IS135	VS107	R20			†C62	3$\frac{11}{16}$	3$\frac{5}{8}$	1⅞	3-$\frac{3}{16}$	P022	.850	3$\frac{5}{16}$	O		
						C327(B) Same as C62—Bushed										
						†C507 Skeleton Type										
					L373		3$\frac{11}{16}$	3$\frac{11}{16}$	1$\frac{15}{16}$	3-$\frac{5}{32}$	P022	.850	3$\frac{5}{16}$	O		

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES Exhaust	VALVES Intake	VALVE GUIDES Exh.	VALVE GUIDES Int.
1	CHEVROLET TRK.	1938	HC, ½T; HD, ¾T; HE, 1T; TA, TB, TC, TD, 1½T	Own	6	S988 卐AS989 S988AEX	V943 V943AIN	G476	G453
2	CHEVROLET TRK.	1937	GC, ½T; SA, SB, SC, SD, 1½T	Own	6	S942 卐AS956 S942AEX	V943 V943AIN	G452	G453
3	CHEVROLET TRK.	1936	FB, ½T, RA, RB, RC, RD, 1½T	Own	6	S858 卐AS896 S858AEX	V859 V859AIN	G371	G392
4	CHEVROLET TRK.	1935	EB, ½T, QA, QB, QC, QD, 1½T	Own	6	S858 卐AS896 S858AEX	V859 V859AIN	G371	G392
			Grooved Stem ☞			S811 卐AS895 S811AEX	V812 V812AIN	G371	G393
			Slotted Stem ☞						
5	CHEVROLET TRK.	1934	DB, ½T, PA, PB, PC, PD, 1½T	Own	6	S811 卐AS895 S811AEX	V812 V812AIN	G371	G372
6	CHEVROLET TRK.	1933	Commercial ½T, Utility 1½T	Own	6	S590 卐AS894 S590AEX	V591 V591AIN	G114	G114
7	CHEVROLET TRK.	1932	Utility, UL	Own	6	*S556 卐AS893 S556AEX	*V557 V557AIN	G114	G114
8	CHEVROLET TRK.	1930-31	LQ, LR, LS, 1½T	Own	6	*S511 卐AS892 *V511 S511AEX	*V512 V512AIN	G114	G114
9	CHEVROLET TRK.	1929	LQ, LR, LS, 1½T	Own	6	*S467 S467AEX	*V467 V467AIN	G114	G114
10	CHEVROLET TRK.	1928	All ½, 1T	Own	4	*S395	*V395 V409		
			.003 O. S. Stem for V395 ☞			S461	V461		
			⅛" O. S. Head for S-V395 ☞			S462			
			⅛" O. S. Head for *S395 ☞						
11	CHEVROLET TRK.	1923-27	All ½, 1T	Own	4	*S27	*V27		
			Cupped Head for V27 ☞				V466		
			.003 O. S. Stem for V27 ☞				V361		
			⅛" O. S. Head for S-V27 ☞			S367	V367		
			⅛" O. S. Head for *S27 ☞			S360			
12	CHEVROLET	1929-32	All	Own	6	Clutch Pilot Bushing Stock No. CP1			
13	CHRYSLER	1938	C18, Royal	Own	6	S940 卐AS973	V941	G337	G338
14	CHRYSLER	1938	C19, Imperial; C20 Custom	Own	8	S835	V836	G408	G341
15	CHRYSLER	1937	C16, Royal	Own	6	S940 卐AS973	V941	G337	G338
16	CHRYSLER	1937	C14, Imperial	Own	8	S833	V834	G408	G341
17	CHRYSLER	1937	C15, Custom Imp. C17, Airflow	Own	8	S835	V836	G408	G341
18	CHRYSLER	1936	C7	Own	8	S888 卐AS906	V889	G408	G341
19	CHRYSLER	1936	C8	Own	8	S833	V834	G408	G341
20	CHRYSLER	1936	C9, C10, C11	Own	8	S835	V836	G408	G341

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS							PISTON PINS				PIN BUSHINGS	
				STOCK NO.			SPECIFICATIONS									
				Alloy	Strut	Iron	Diam.	Lgth.	Comp.	Rings Used	Stock No.	Diam.	Lgth.	Type	Stock No.	No. Used
1		VS421	R151			†C993(B)	3 1/8	4 11/16	2.23	2-1/16, 1-3/16	P975	.865	3 3/32	O	PB747	12
						♂Cam ground—Tin plated										
						C992(B)	3 1/8	4 11/16	2.23	2-1/16, 1-3/16	P975	.865	3 3/32	O	PB747	12
						♂Cam ground—Not plated										
				L648			3 1/8	4 3/16	2 5/16	2-1/16, 1-3/16	P975	.865	3 3/32	O		
				♂T Slot—Cam ground type												
2		VS328	R151			†C993(B)	3 1/8	4 11/16	2.23	2-1/16, 1-3/16	P975	.865	3 3/32	O	PB747	12
						♂Cam ground—Tin plated										
						C992(B)	3 1/8	4 11/16	2.23	2-1/16, 1-3/16	P975	.865	3 3/32	O	PB747	12
						♂Cam ground—Not plated										
				L648			3 1/8	4 3/16	2 5/16	2-1/16, 1-3/16	P975	.865	3 3/32	O		
				♂T Slot —Cam ground.												
3		VS328	R119		Tin Plated	†C900(B)	3 1/16	3 11/16	1 7/8	2-1/16, 1-3/16	P650	.990	2 23/32	O	PB623	12
						C850(B)	3 1/16	3 11/16	1 7/8	2-1/16, 1-3/16	P650	.990	2 23/32	O	PB623	12
						♂Cam ground type—Not plated.										
						C890(B) Same as C850 except relieved for round grinding.										
					Tin Plated	C950(B) Same as C900 except round ground.										
				L500	L450		3 1/16	3 11/16	1 7/8	3-5/32	P650	.990	2 23/32	O		
4		VS345	R119		Tin Plated	†C900(B)	3 1/16	3 11/16	1 7/8	2-1/16, 1-3/16	P650	.990	2 23/32	O	PB623	12
						C850(B)	3 1/16	3 11/16	1 7/8	2-1/16, 1-3/16	P650	.990	2 23/32	O	PB623	12
						♂Cam Ground Type										
			R123			C890 Same as C850 except relieved for round grinding.										
				L500	L450		3 1/16	3 11/16	1 7/8	3-5/32	P650	.990	2 23/32	O		
5	IS146	VS328	R123	Cam Ground Type		†C850(B)	3 1/16	3 11/16	1 7/8	2-1/16, 1-3/16	P650	.990	2 23/32	O	PB623	12
						C890 Same as C850 except relieved for round grinding.										
				L500	L450		3 1/16	3 11/16	1 7/8	3-5/32	P650	.990	2 23/32	O		
6	IS100	VS284	R20	Cam Ground		†C800(B)	3 1/16	3 11/16	1 7/8	2-1/16, 1-3/16	P650	.990	2 23/32	O	PB623	12
						C889 Same as C800 except relieved for round grinding.										
				L500	L450		3 1/16	3 11/16	1 7/8	3-5/32	P650	.990	2 23/32	O		
7	IS100	VS284	R20	L500	L450	†C700(B)	3 1/16	3 11/16	1 7/8	3-5/32	P650	.990	2 23/32	O	PB623	12
						C888 Same as C700 except relieved for round grinding.										
8	IS100	VS284	R20	L500	L450	†C700(B)	3 1/16	3 11/16	1 7/8	3-5/32	P650	.990	2 23/32	O	PB623	12
						C888 Same as C700 except relieved for round grinding.										
9	IS102	VS284	R20	L500	L450	†C650	3 1/16	3 11/16	1 7/8	3-5/32	P650	.990	2 23/32	O		
						C700(B) Same as C650—Bushed										
10	IS107	VS107	R20		L373		3 11/16	3 11/16	1 11/16	3-5/32	P644	.850	3 1/16	O		
						C62	3 11/16	3 5/8	1 7/8	3-7/16	P644	.850	3 1/16	O		
						C327(B) Same as C62—Bushed										
						†C507 Skeleton Type										
11	IS135	VS107	R20			†C62	3 11/16	3 5/8	1 7/8	3-7/16	P022	.850	3 1/16	O		
						C327(B) Same as C62—Bushed										
						†C507 Skeleton Type										
					L373		3 11/16	3 11/16	1 11/16	3-5/32	P022	.850	3 1/16	O		
12																
13	IS131	VS422	R101	†L616			3 3/8	3 7/8	2	2-1/16, 2-5/32	P594	.859	2 7/8	F	PB671	6
14		VS423	R101	†L615			3 1/4	3 7/8	2	2-1/16, 2-5/32	P731	.859	2 11/16	F	PB671	8
15		VS412	R101	†L616			3 3/8	3 7/8	2	2-1/16, 2-5/32	P594	.859	2 7/8	F	PB671	6
16	IS101	VS337	R101	†L615			3 1/4	3 7/8	2	2-1/16, 2-5/32	P731	.859	2 11/16	F	PB671	8
17	IS101	VS337	R101	†L615			3 1/4	3 7/8	2	2-1/16, 2-5/32	P731	.859	2 11/16	F	PB671	8
18	IS125	VS337	R101	†L548 S1 Cam Ground Type			3 3/8	3 7/8	2	2-1/16, 2-5/32	P594	.859	2 7/8	F	PB671	6
				L590 Same as L548 except relieved for round grinding.												
				L616 S1 U Slot Type			3 3/8	3 7/8	2	2-1/16, 2-5/32						
19	IS101	VS337	R101	†L547 S1 Cam Ground Type			3 1/4	3 7/8	2	2-1/16, 2-5/32	P731	.859	2 11/16	F	PB671	8
				L589 Same as L547 except relieved for round grinding.												
				L615 S1 U Slot Type			3 1/4	3 7/8	2	2-1/16, 2-5/32						
20	IS101	VS337	R101	†L547 S1 Cam Ground Type			3 1/4	3 7/8	2	2-1/16, 2-5/32	P731	.859	2 11/16	F	PB671	8
				L589 Same as L547 except relieved for round grinding.												
				L615 S1 U Slot Type			3 1/4	3 7/8	2	2-1/16, 2-5/32						

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Ch-Ch Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	CHRYSLER	1934-35	CA, CB, C6	Own	6	S594 卐AS854	V595	G104	G341
2	CHRYSLER	1934-35	CU, CZ	Own	8	S833	V834	G104	G341
3	CHRYSLER	1934-35	Imperial, CV, C1, C2, C3	Own	8	S835	V836	G104	G341
4	CHRYSLER	1933	CO, CR	Own	6	S594 卐AS854	V595	G104	G341
5	CHRYSLER	1933	CT, Royal Eight	Own	8	S596	V597	G104	G341
6	CHRYSLER	1933	CQ, Imperial Eight to Eng. No. CQ1768	Own	8	S576	V802	G104	G341
7	CHRYSLER	1933	CQ, Imperial Eight after Eng. No. CQ1768	Own	8	S814	V815	G104	G341
8	CHRYSLER	1932	CI, Six	Own	6	S549	V550	G104	G341
9	CHRYSLER	1932	CP, Eight	Own	8	S576	V577	G104	G341
10	CHRYSLER	1932	CH, CL, Imperial	Own	8	S575	V535	G321	G109
11	CHRYSLER	1931	CM Six after Car No. 6520501	Own	6	S443	V542	G104	G341
12	CHRYSLER	1931	Eight to Motor No. CD11532	Own	8	S521	V521	G104	G341
13	CHRYSLER	1931	Eight after Motor No. CD11532	Own	8	S521	V521	G104	G341
14	CHRYSLER	1931	CD, De Luxe Eight	Own	8	S551	V552	G104	G341
15	CHRYSLER	1931	Imperial Eight, CG	Own	8	S534	V535	G108	G109
16	CHRYSLER	1930	CU Six to Car No. 6520501	Own	6	S443	V443	G104	G341
17	CHRYSLER	1930	66, 70 to Motor No. V13858	Own	6	S498	V499	G108	G109
18	CHRYSLER	1930	77, 70 after Motor No. V13858	Own	6	S496	V497	G110	G111
19	CHRYSLER	1929-30	Imperial 80	Own	6	S346	V460	G112	G113
20	CHRYSLER	1929	65	Own	6	S366	V459	G108	G109
21	CHRYSLER	1928-29	72, 75	Own	6	S405	V406	G110	G111
22	CHRYSLER	1928-29	52, after Motor No. 127749	Own	4	S72	V424	G106	G107
23	CHRYSLER	1926-28	60, 62	Own	6	S366	V366	G108	G109
24	CHRYSLER	1926-28	Imperial 80	Own	6	S346	V347	G112	G113
25	CHRYSLER	1926-27	70	Own	6	S18	V18	G108	G109

*Indicates $\frac{1}{64}$" oversize stem valve also carried.
(6-1-38)

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS125	VS337	R101	†L548 Cam Ground Type			3⅝	3⅞	2	2-⅛, 2-$\frac{1}{11}$	P594	.859 .008 O. S. on O. D.	2⅞	F	PB671 ♂PB719	6
				L590 Same as L548 except relieved for round grinding.												
				L616 U Slot Type			3⅝	3⅞	2	2-⅛, 2-$\frac{1}{11}$						
2	IS101	VS337	R101	†L547 Cam Ground Type			3¼	3⅞	2	2-⅛, 2-$\frac{1}{11}$	P731	.859	2$\frac{11}{16}$	F	PB671	8
				L589 Same as L547 except relieved for round grinding.												
				L615 U Slot Type			3¼	3⅞	2	2-⅛, 2-$\frac{1}{11}$						
3	IS101	VS337	R101	†L547 Cam Ground Type			3¼	3⅞	2	2-⅛, 2-$\frac{1}{11}$	P731	.859	2$\frac{11}{16}$	F	PB671	8
				L589 Same as L547 except relieved for round grinding.												
				L615 U Slot Type			3¼	3⅞	2	2-⅛, 2-$\frac{1}{11}$						
4	IS125	VS294	R101	†L526 Cam Ground Type			3¼	3⅞	2	Fac. Dup.	P731	.859	2$\frac{11}{16}$	F	PB671	6
				L584 Same as L526 except relieved for round grinding.												
				L527 Cam Ground Type			3¼	3⅞	2	4-⅛, 1-$\frac{1}{11}$	P731	.859	2$\frac{11}{16}$	F	PB671	6
				L585 Same as L527 except relieved for round grinding.												
5	IS125	VS294	R101	†L526 Cam Ground Type			3¼	3⅞	2	Fac. Dup.	P731	.859	2$\frac{11}{16}$	F	PB671	8
				L584 Same as L526 except relieved for round grinding.												
				L527 Cam Ground Type			3¼	3⅞	2	4-⅛, 1-$\frac{1}{11}$	P731	.859	2$\frac{11}{16}$	F	PB671	8
				L585 Same as L527 except relieved for round grinding.												
6	IS101	VS294	R66	†L526 Cam Ground Type			3¼	3⅞	2	Fac. Dup.	P731	.859	2$\frac{11}{16}$	F	PB671	8
				L584 Same as L526 except relieved for round grinding.												
				L527 Cam Ground Type			3¼	3⅞	2	4-⅛, 1-$\frac{1}{11}$	P731	.859	2$\frac{11}{16}$	F	PB671	8
				L585 Same as L527 except relieved for round grinding.												
7	IS101	VS294	R101	†L526 Cam Ground Type			3¼	3⅞	2	Fac. Dup.	P731	.859	2$\frac{11}{16}$	F	PB671	8
				L584 Same as L526 except relieved for round grinding.												
				L527 Cam Ground Type			3¼	3⅞	2	4-⅛, 1-$\frac{1}{11}$	P731	.859	2$\frac{11}{16}$	F	PB671	8
				L585 Same as L527 except relieved for round grinding.												
8	IS125	VS294	R66		†L507		3¼	3$\frac{11}{16}$	2	Fac. Dup.	P731	.859	2$\frac{11}{16}$	F	PB671	6
					L508		3¼	3$\frac{11}{16}$	2	3-⅛, 1-$\frac{1}{11}$	P731	.859	2$\frac{11}{16}$	F	PB671	6
9	IS101	VS294	R66		†L507		3¼	3$\frac{11}{16}$	2	Fac. Dup.	P731	.859	2$\frac{11}{16}$	F	PB671	8
					L508		3¼	3$\frac{11}{16}$	2	3-⅛, 1-$\frac{1}{11}$	P731	.859	2$\frac{11}{16}$	F	PB671	8
10	IS127	VS294	R66		†L498		3½	4⅛	2$\frac{5}{16}$	Fac. Dup.	P733	.8595	2$\frac{11}{16}$	F	PB667	16
11	IS125	VS263	R10		†L507		3¼	3$\frac{11}{16}$	2	Fac. Dup.	P731	.859	2$\frac{11}{16}$	F	PB671	6
					L508		3¼	3$\frac{11}{16}$	2	3-⅛, 1-$\frac{1}{11}$	P731	.859	2$\frac{11}{16}$	F	PB671	6
12	IS101	VS263	R10		†L481		3	3$\frac{11}{16}$	2	Fac. Dup.	P720	.734	2$\frac{11}{16}$	F	PB636	8
					L482		3	3$\frac{11}{16}$	2	3-⅛, 1-$\frac{1}{11}$	P720	.734	2$\frac{11}{16}$	F	PB636	8
13	IS101	VS263	R10		†L505		3⅛	3$\frac{11}{16}$	2	Fac. Dup.	P755	.860	2⅝	F	PB671	8
					L506		3⅛	3$\frac{11}{16}$	2	3-⅛, 1-$\frac{1}{11}$	P755	.860	2⅝	F	PB671	8
14	IS101	VS263	R66		†L507		3¼	3$\frac{11}{16}$	2	Fac. Dup.	P731	.859	2$\frac{11}{16}$	F	PB671	8
					L508		3¼	3$\frac{11}{16}$	2	3-⅛, 1-$\frac{1}{11}$	P731	.859	2$\frac{11}{16}$	F	PB671	8
15	IS107	VS156	R66		†L498		3½	4⅛	2$\frac{5}{16}$	Fac. Dup.	P733	.8595	2$\frac{11}{16}$	F	PB667	16
16	IS125	VS156	R10		†L434		3⅛	3$\frac{11}{16}$	2	Fac. Dup.	P232	.812	2$\frac{13}{16}$	O		
				L232	L366	C508(B)	3⅛	3$\frac{11}{16}$	2	3-⅛	P232	.812	2$\frac{13}{16}$	O		
17	IS147	VS156	R66		†L434		3⅛	3$\frac{11}{16}$	2	Fac. Dup.	P232	.812	2$\frac{13}{16}$	O		
				L232	L366	C508(B)	3⅛	3$\frac{11}{16}$	2	3-⅛	P232	.812	2$\frac{13}{16}$	O		
18	IS107	VS117	R66		†L463		3⅝	4⅛	2$\frac{5}{16}$	Fac. Dup.	P688	.859	2$\frac{11}{16}$	F	PB600	6
					L464		3⅝	4⅛	2$\frac{5}{16}$	3-⅛, 1-$\frac{5}{11}$	P688	.859	2$\frac{11}{16}$	F	PB600	6
19	IS114	VS129	R116		†L445		3⅝	4$\frac{5}{16}$	2$\frac{1}{16}$	Fac. Dup.	P668	1.000	3¼	O		
					L535		3⅝	4$\frac{5}{16}$	2$\frac{1}{16}$	4-⅛, 1-$\frac{5}{11}$	P668	1.000	3¼	O		
20		VS156	R10		†L434		3⅛	3$\frac{11}{16}$	2	Fac. Dup.	P232	.812	2$\frac{13}{16}$	O		
				L232	L366	C508(B)	3⅛	3$\frac{11}{16}$	2	3-⅛	P232	.812	2$\frac{13}{16}$	O		
21	IS127	VS117	R10		†L377		3¼	4⅛	2$\frac{5}{16}$	Fac. Dup.	P710	.875	2⅞	O		
					L375		3¼	4⅛	2$\frac{5}{16}$	3-⅛, 1-$\frac{7}{11}$	P710	.875	2⅞	O		
22	IS107	VS135	R12	†L121			3⅝	4⅛	2	3-⅛, 1-$\frac{5}{11}$	P121	.749	3	O		
						C465	3⅝	4⅛	2	3-⅛	P121	.749	3	O		
23	IS103	VS156	R10		†L388		3	3$\frac{11}{16}$	2	Fac. Dup.	P120	.749	2$\frac{11}{16}$	O		
				L120	L365	C391	3	3$\frac{11}{16}$	2	3-⅛	P120	.749	2$\frac{11}{16}$	O		
24	IS114	VS129	R116		L422		3½	3⅞	2⅛	2-⅛, 1-$\frac{5}{11}$	P817	.999	3⅛	O		
				†L317			3½	4	2⅛	3-⅛	P817	.999	3⅛	O		
25	IS127	VS117	R10		†L434		3⅛	3$\frac{11}{16}$	2	Fac. Dup.	P232	.812	2$\frac{13}{16}$	O		
				L232	L366	C508(B)	3⅛	3$\frac{11}{16}$	2	3-⅛	P232	.812	2$\frac{13}{16}$	O		

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin

Ch-Co Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	CHRYSLER	1924-25	70	Own	6	S18	V18	G108	G109
	CHRYSLER	1925-28	58, 50, 52 to Motor No. 127749	Own	4	S72	V72	G106	G107
3	CHRYSLER MARINE		Crown, M2M	Own	6	S940 卐AS973	V941	G337	G338
4	CHRYSLER MARINE		Imperial After LM4568	Own	6	AS742	V667	G112	G113
5	CHRYSLER MARINE		Imp., Serial LM1201 to LM4568 except Nos. 4202, 4278, 4389, 4391, 4392, 4400 to 4409, 4412 to 4420, 4425 to 4429, 4435, 4449 to 4566	Own	6	S666	V667	G112	G113
6	CHRYSLER MARINE		Majestic After YM1280	Own	8			G321	G109
7	CHRYSLER MARINE		Majestic, No. YM1210 to YM1280	Own	8	S575	V535	G321	G109
8	CHRYSLER MARINE		Majestic From YM1179 to YM1210	Own	8	S575	V535	G321	G109
9	CHRYSLER MARINE		Majestic From YM1112 to YM1179	Own	8		V535		G109
10	CHRYSLER MARINE		Majestic to Eng. YM1112	Own	8	S534	V535	G108	G109
11	CLETRAC TRAC.	1932-38	25, BG	Herc. JXC	6	S701 卐AS772	V702	G386	G386
12	CLETRAC TRAC.	1931-38	15, 20, E, EN, AG, E31, E38, E62, E68, E76	Herc. OOC	4	S735 ♂Drilled Stem S701 卐AS772	V736 V702	G386	G386
				Slotted Stem*					
13	CLETRAC TRAC.	1931-38	35, 40-30, CG	Herc. WXT	6	S624 卐AS970	V625	G267	G267
14	CLETRAC TRAC.	1928-36	40, 55	Wisc. Z	6	S644	V644	G380	G380
15	CLETRAC TRAC.	1931	20K after K19410	Own	4	S236 ♂Grooved Stem S276 S292	 V292	G374 G438 ♂.003"	G374 G438 O.S.
				⅛" O.S. Hd. for S236*					
				Drilled Stem*					
16	CLETRAC TRAC.	1926-30	30-45, 30, 30A	Wisc. H	6	S291	V291	G380	G380
17	CLETRAC TRAC.	1920-29	K15-25, W12-20, 20-27, 20	Own	4	S236 ♂Grooved Stem		G374	G374
				Drilled Stem*		S292	V292	G438 ♂.003"	G438 O.S.
18	CLETRAC TRAC.	1924-27	M, K, 20-27	Weid. M	4	S236 ♂Grooved Stem		G374	G374
				⅛" O.S. Hd. for S236*		S276		G438	G438
				Drilled Stem*		S292	V292	♂.003"	O.S.
19	CLETRAC TRAC.	1919-23	H	Weid. H	4	S236		G374	G374
20	CLEVELAND	1925-26	43	Own	6	S310	V310	G215	G215
21	CLIMAX MOTOR		K, T, U	Own	4	S262	V262		
22	COLEMAN TRUCK	1933-36	E53, 3½T	Buda K428	6	S706	V707	G396	G397
23	COLEMAN TRUCK	1933-36	E56, 6, 7½T	Buda GF6	6	S260	V261		
24	COLEMAN TRUCK	1929-32	D40X, D40XX, X100, 3½, 6T	Buda BA6	6	S661	V220	G253	G253
25	COLEMAN TRUCK	1928-32	D40, C25, C30, 2½, 3T	Buda DW6	6	S610	V610	G236	G236
26	COMMERCE TRK.	1932	40, 1½, 2, 2½T	Buda DW6	6	S610	V610	G236	G236

*Indicates $\frac{1}{32}$" oversize stem valve also carried.
(6-1-38)

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS							PISTON PINS				PIN BUSHINGS	
				STOCK NO.			SPECIFICATIONS									
				Alloy	Strut	Iron	Diam.	Lgth.	Comp.	Rings Used	Stock No.	Diam.	Lgth.	Type	Stock No.	No. Used
1	IS127	VS117	R10	†L120	L365	C391	3	3 11/16	2	3-1/8	P120	.749	2 11/16	O		
2	IS107	VS135	R12	†L121			3 5/8	4 1/8	2	3-1/8, 1-5/32	P121	.749	3	O		
						C465	3 5/8	4 1/8	2	3-1/8	P121	.749	3	O		
3			R101	†L616M			3.395	3 7/8	2	2-1/8, 2-5/32	P594	.859	2 7/8	F	PB671	6
4			R13		†L445M		3.645	4 1/16	2 1/16	Fac. Dup.	P668	1.000	3 1/4	O		
					L535M		3.645	4 1/16	2 1/16	4-1/8, 1-5/32	P668	1.000	3 1/4	O		
5			R13		†L445M		3.645	4 1/16	2 1/16	Fac. Dup.	P668	1.000	3 1/4	O		
					L535M		3.645	4 1/16	2 1/16	4-1/8, 1-5/32	P668	1.000	3 1/4	O		
6			R101		†L498M		3.520	4 1/8	2 1/16	Fac. Dup.	P733	.8595	2 31/32	F	PB667	16
7			R66		†L498M		3.520	4 1/8	2 1/16	Fac. Dup.	P733	.8595	2 31/32	F	PB667	16
8			R66		†L422M		3.520	3 7/8	2 1/8	2-1/8, 1-3/16	P317	.999	3 1/8	O		
				†L317M			3.520	4	2 1/8	3-1/8	P317	.999	3 1/8	O		
9			R66		†L422M		3.520	3 7/8	2 1/8	2-1/8, 1-3/16	P317	.999	3 1/8	O		
				†L317M			3.520	4	2 1/8	3-1/8	P317	.999	3 1/8	O		
10			R66		†L422M		3.520	3 7/8	2 1/8	2-1/8, 1-3/16	P317	.999	3 1/8	O		
				†L317M			3.520	4	2 1/8	3-1/8	P317	.999	3 1/8	O		
11	IS131	VS353	R126			†C813(B)	3 3/4	4 1/8	2 1/8	3-1/8, 1-3/16	P813	1.000	3 3/8	O		
				L563 Aerotype			3 3/4	4 1/8	2 1/8	3-1/8, 1-1/16	P813	1.000	3 3/8	O		
12	IS106	VS353	R126			†C844(B)	4	4 1/16	2 1/8	3-1/8, 1-3/16	P677	1.000	3 5/8	O		
13	IS109	VS334	R146			†C920(B)	4 1/4	4 3/16	2 3/16	4-3/16	P785	1.125	3 5/8	O		
14	IS140	VS396 ♂ Outer In. ☞ VS397	R88			†C431	4 1/2	4 3/4	2 3/4	4-3/16	P722	1.187	3 13/16	WK	PB520	6
15		VS366	R138			†C843	4	4 1/2	2 3/8	4-1/4	P201	1.187	3 1/4	F	PB607	4
16	IS132	VS388	R139			†C635	4	4 1/2	2 3/4	4-3/16	P637	1.1875	3 3/16	WK	PB533	6
17	IS143	VS366	R138			†C740	4	4 11/16	2 13/16	3-1/4	P740	1.000	3 1/8	F	PB723	4
18	IS143	VS366	R138			†C462	4	4 1/2	2 3/8	4-1/4	P137	1.000	3 1/2	F	PB723	4
19						†C483	3 3/4	4 13/16	2 13/16	3-1/4	P577	1.000	3 1/4	F		
20		VS232	R80			†C392(B)	3 1/8	4 1/4	2 3/8	2-1/8, 1-3/16	P239	.968	2 11/16	O		
						†C353	3 1/8	4 1/4	2 3/8	2-1/8, 1-3/16	P515	.968	2 11/16	S		
21			Raise	*each unit sale by suggesting correlated*							*parts*					
22	IS132															
23	IS156		R6													
24	IS130	VS236	R6			†C795	4 1/8	5	2 1/2	4-3/4	P795	1.500	3 3/16	F	PB627	6
25	IS128	VS242	R7			†C721	3 3/4	4 3/8	2 1/8	4-3/16	P721	1.375	3	F	PB589	6
26	IS128	VS242	R7			†C721	3 3/4	4 3/8	2 1/8	4 3/16	P721	1.375	3	F	PB589	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Co-Co Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	COMMERCE TRK.	1929-32	60, 68, 80, 100, 3, 4, 5T	Buda BA6	6	S661	V220	G253	G253
2	COMMERCE TRK.	1929-32	20Z, 20Y, 25Z, S11, 1, 2T	Buda HS6	6	S640	V640	G240	G240
3	COMMERCE TRK.	1929	50Z, 60Z, 2½, 3T	Buda Bus	6	S205	V220	G253	G253
4	COMMERCE TRK.	1928	8A, 1T	Cont. 11U	6	S343	V344	G225	G225
5	CONTINENTAL	1933-35	Beacon	Own C400	4	S790	V791		
6	CONTINENTAL	1933-34	Flyer	Own C600	6	S790	V791		
7	CONTIN'T'L MTR.		E602, E603	Own	6	S775	V776		
8	CONTIN'T'L MTR.		E610, E611, E612, E613, 29B, 32B	Own	6	S775	V776		
9	CONTIN'T'L MTR.	1930-32	W20, M5, M7	Own	4	S586	V587		
10	CONTIN'T'L MTR.		24L	Own	6	S357	V358	G184	G184
11	CONTIN'T'L MTR.	1927	8F	Own	6	S384	V385	G232	G232
12	CONTIN'T'L MTR.	1928-29	9F	Own	6	S508	V385	G232	G232
13	CONTIN'T'L MTR.	1925-30	9L, 14L to No. 92324, 20L	Own	6	S357	V358	G184	G184
14	CONTIN'T'L MTR.		18L	Own	6	S355	V356	G225	G225
15	CONTIN'T'L MTR.	1925-26	8P	Own	8	S335	V335		
16	CONTIN'T'L MTR.	1927-32	26L, 28L, 29L, 30L, 31L, 32L, 34L, 37L	Own	6	S357	V358	G184	G184
17	CONTIN'T'L MTR.	1930-31	17S	Own	8	S432	V433	G258	G258
18	CONTIN'T'L MTR.	1928-30	15L, 14L after No. 92350	Own	6	S357	V358	G184	G184
19	CONTIN'T'L MTR.	1927-29	8S	Own	8	S432	V433	G270	G270
20	CONTIN'T'L MTR.	1927-28	19L	Own	6	S355	V356	G184	G184
21	CONTIN'T'L MTR.	1931-32	R800	Own	8	S582	V583	G270	G270
22	CONTIN'T'L MTR.	1928-31	14S, 15S, 16S, 18S, 21S	Own	8	S432	V433	G258	G258
23	CONTIN'T'L MTR.	1925-26	9K	Own	8	S322	V323	G184	G184
24	CONTIN'T'L MTR.	1923-25	6Y, 7U to 41896	Own	4-6	S44	V44	G225	G225
25	CONTIN'T'L MTR.	1925-26	7U after No. 41896, 7Z, 6W, 10U	Own	6	S44	V44	G225	G225
26	CONTIN'T'L MTR.	1930-32	22A, 30A	Own	6	S546	V392	G229	G229
27	CONTIN'T'L MTR.	1928-30	12C	Own	6	S641	V344	G225	G225
28	CONTIN'T'L MTR.	1927-30	10E, 12E, 15E	Own	6	S391	V392	G229	G229
29	CONTIN'T'L MTR.	1926-29	8U to 13097, 11U, 14U, 18U	Own	6	S343	V344	G225	G225
30	CONTIN'T'L MTR.	1914-28	7R, 7C	Own	6	S2	V2	G174	G174
31	CONTIN'T'L MTR.		10S	Own	6	S432	V433	G258	G258
32	CONTIN'T'L MTR.	1928-33	H8, H9, P20, P20A, W5	Own	4	S717	V44	G184	G184
33	CONTIN'T'L MTR.	1931-33	25A, 26A, 26B	Own	6	S546	V392	G229	G229
34	CONTIN'T'L MTR.	1929-32	13K, 14K, 15K	Own	8	S492	V493	G259	G259
35	CONTIN'T'L MTR.	1928-32	12K	Own	8	S447	V448	G265	G265
36	CONTIN'T'L MTR.	1928-33	15C, 14C, 27B, 16C, P45A	Own	6	S641	V344	G225	G225
37	CONTIN'T'L MTR.	1928-32	11E, 14E, 16E, 17E, 18E, 19E, 28B	Own	6	S391	V392	G229	G229
38	CONTIN'T'L MTR.	1928-31	15U, 18C	Own	6	S343	V344	G225	G225

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS130	VS236	R6			†C795	4 1/8	5	2 1/2	4-3/4	P795	1.500	3 5/16	F	PB627	6
2	IS165	VS246	R7			†C604	3 5/8	3 7/8	1 7/8	4-3/16	P604	1.125	2 13/16	F	PB621	6
3	IS130	VS236	R6			†C695	4	5	2 1/2	4-3/4	P695	1.499	3 11/16	F	PB627	6
4	IS165	VS231	R12			†C479	3 1/4	3 3/4	2 5/16	3-3/16	P282	1.000	2 13/16	S	PB558	6
					L433		3 1/4	3 3/4	2 5/16	3-3/16, 1-5/32	P518	1.000	2 3/4	F	PB558	6
5	IS150		R38								P594	.859	2 7/8	F	PB600	4
6	IS150		R38								P615	.859	2 15/32	F		
7	IS132	VS221									P709	1.250	3 13/32	F		
8	IS132															
9	IS165	VS115	R12													
10	IS100	VS251	R12	*Tin-plating a piston is like buying insurance.*												
11	IS150	VS254	R14			†C515	2 5/8	3	1 3/4	3-1/8, 1-3/16	P377	.734	2 3/32	F	PB552	6
				L376			2 5/8	3 1/8	1 3/4	4-1/8	P377	.734	2 3/32	F	PB552	6
12	IS150	VS254	R14			†C590	2 3/4	3	1 3/4	3-1/8, 1-3/16	P590	.734	2 3/32	F	PB552	6
13	IS100	VS162	R12	L387	†L367		2 3/4	3 3/8	1 11/16	2-1/8, 1-3/16	P319	.734	2 5/8	F	PB552	6
						C457	2 3/4	3 3/8	1 11/16	3-3/16	P279	.734	2 1/16	S	PB552	6
14	IS100	VS162	R12			†C457	2 3/4	3 3/8	1 11/16	3-3/16	P279	.734	2 1/16	S	PB552	6
				L387	†L367		2 3/4	3 3/8	1 11/16	2-1/8, 1-3/16	P319	.734	2 5/8	F	PB552	6
15						†C522	2 13/16	3	1 13/32	3-1/8, 1-3/16	P290	.750	2 1/16	F	PB548	8
16	IS100	VS251	R12			†C472	2 7/8	3 5/32	1 27/32	2-1/8, 1-3/16	P701	.734	2 13/32	F	PB552	6
17	IS102	VS255			†L472		2 7/8	3 5/8	2 1/8	3-1/8, 1-3/16	P615	.859	2 15/32	F	PB634	8
						C437	2 7/8	3 5/8	2 1/8	3-3/16	P293	.860	2 5/8	S	PB634	8
18	IS100	VS162	R12		†L402		2 7/8	3 1/16	2	3-1/8, 1-5/32	P701	.734	2 13/32	F	PB552	6
19	IS102	VS202				†C437	2 7/8	3 5/8	2 1/8	3-3/16	P293	.860	2 5/8	S	PB634	8
					L472		2 7/8	3 5/8	2 1/8	3-1/8, 1-3/16	P615	.859	2 15/32	F	PB634	8
20	IS102	VS251	R12			C472	2 7/8	3 5/32	1 27/32	2-1/8, 1-3/16	P701	.734	2 13/32	F	PB552	6
21	IS102				†L399		3	3 5/8	2 1/8	3-1/8, 1-3/16	P615	.859	2 15/32	F	PB634	8
22	IS102	VS202 In. VS255			†L399		3	3 5/8	2 1/8	3-1/8, 1-3/16	P615	.859	2 15/32	F	PB634	8
23	IS105	VS115	R34			†C367	3	3 3/4	2 1/4	3-3/16	P254	.860	2 3/16	S		
24	IS127	VS20	R12			†C213	3 1/8	3 1/4	1 11/16	3-3/16	P092	.750	2 3/4	O		
25	IS127	VS20	R12			†C423	3 1/8	3 1/4	1 11/16	3-3/16	P278	.860	2 13/16	S	PB557	6
26	IS135		R12		L372		3 1/4	3 11/16	2 5/16	3-1/8, 1-5/32	P578	.859	2 3/4	F	PB600	6
27	IS165	VS231	R12			†C479	3 1/4	3 3/4	2 5/16	3-3/16	P282	1.000	2 13/16	S	PB558	6
					L433		3 1/4	3 3/4	2 5/16	3-1/8, 1-5/32	P518	1.000	2 3/4	F	PB558	6
28	IS135	VS231	R12		†L372		3 1/4	3 11/16	2 5/16	3-1/8, 1-5/32	P578	.859	2 3/4	F	PB600	6
29	IS165	VS202	R12			†C479	3 1/4	3 3/4	2 5/16	3-3/16	P282	1.000	2 13/16	S	PB558	6
					L433		3 1/4	3 3/4	2 5/16	3-1/8, 1-5/32	P518	1.000	2 3/4	F	PB558	6
30	IS165	VS19	R81	L11		†C107	3 1/4	4 1/16	2 5/16	3-3/16	P011	.860	3 1/16	S	PB503	6
31		VS202			L372		3 1/4	3 11/16	2 5/16	3-1/8, 1-5/32	P578	.859	2 3/4	F	PB634	6
32	IS165	VS20	R12	L381	†L368	†C442	3 5/8	4	1 11/16	2-1/8, 1-3/16	P209	.859	2 13/16	F	PB546	4
33	IS135		R12		L389	†C596	3 5/8	3 11/16	2 5/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
34	IS105	VS115	R71		†L460		3 5/8	3 11/16	2 5/16	2-1/8, 1-3/16	P647	.859	2 7/8	F	PB600	8
35	IS105	VS115	R73		†L389	C596	3 5/8	3 11/16	2 5/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	8
36	IS165	VS231	R12		†L389	†C596	3 5/8	3 11/16	2 5/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
37	IS135	VS231	R12		†L389	C596	3 5/8	3 11/16	2 5/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
38	IS165	VS231	R12		†L389	C596	3 5/8	3 11/16	2 5/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Co-Co Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES Exhaust	VALVES Intake	VALVE GUIDES Exh.	VALVE GUIDES Int.
1	CONTIN'T'L MTR.	1922-32	8R, 6M, 2P	Own	6	S2	V2	G174	G174
2	CONTIN'T'L MTR.	1922-24	6T	Own	6	S61	V61	G189	G189
3	CONTIN'T'L MTR.	1932-36	E600	Own	6	S775	V776		
4	CONTIN'T'L MTR.	1926-30	6B, 8B, 7J, P56	Own	6	S287	V287	G189	G189
				Taper Grooved Stem		♂ Grooved Stem S288	V288		
5	CONTIN'T'L MTR.	1917-30	J4	Own	4	S100	V100	G195	G195
6	CONTIN'T'L MTR.	1917-30	6J, 8A, 9A, 8AP, 10A	Own	6	S61	V61	G189	G189
7	CONTIN'T'L MTR.	1914-26	NA, V4	Own	4	S102	V102	G175	G175
8	CONTIN'T'L MTR.	1916-27	N	Own	4	S102	V102	G175	G175
9	CONTIN'T'L MTR.	1932-36	E601	Own	6	S775	V776		
10	CONTIN'T'L MTR.		W9	Own	4	S717	V44	G184	G184
11	CONTIN'T'L MTR.	1930-32	W8, W10, W11	Own	4	S586	V587		
12	CONTIN'T'L MTR.	1928-38	16R, 18R, 29R, 30R, 30B, 31B	Own	6	S639	V639		
						♂ 3/8" Stem 45° Seat			
				Single Groove 1/8" Stem 45° Seat		S673	V674	G313	G314
				Single Groove 1/8" Stem 60° Seat		S1015	V776	♂ 1/16" I.D.	
				Double Groove 1/8" Stem 60° Seat		S1016	V1018		
				Aerotype for S1016		卐AS1017			
13	CONTIN'T'L MTR.	1928-38	20R, 31R, 33B, P73A	Own	6	S639	V639		
						♂ 3/8" Stem 45° Seat			
				Single Groove 1/8" Stem 45° Seat		S673	V674	G313	G314
				Single Groove 1/8" Stem 60° Seat		S1015	V776	♂ 1/16" I.D.	
				Double Groove 1/8" Stem 60° Seat		S1016	V1018		
				Aerotype for S1016		卐AS1017			
14	CONTIN'T'L MTR.	1926-30	7T, 8T	Own	6	S642	V643		
15	CONTIN'T'L MTR.	1922-30	K4	Own	4	S107	V107	G193	G193
16	CONTIN'T'L MTR.	1915-25	C2	Own	4	S106	V106	G176	G176
17	CONTIN'T'L MTR.	1915-25	C, C4	Own	4	S105	V105	G177	G177
18	CONTIN'T'L MTR.	1930-36	S10, S11, S12, S15, P39A	Own	4	S687	V688	G316	G316
19	CONTIN'T'L MTR.	1927-30	12T, 15T, 16T	Own	6	S642	V643		
20	CONTIN'T'L MTR.	1925-30	S4, S5, M4, P1, P35, P35A	Own	4	S263	V263		
21	CONTIN'T'L MTR.	1924-30	L5	Own	4	S101	V101	G193	G193
				Taper Grooved Stem		♂ Grooved Stem S608	V608		
22	CONTIN'T'L MTR.	1930-38	21R, 34B, 32R, P80A	Own	6	S639	V639		
						♂ 3/8" Stem 45° Seat			
				Single Groove 1/8" Stem 45° Seat		S673	V674	G313	G314
				Single Groove 1/8" Stem 60° Seat		S1015	V776	♂ 1/16" I. D.	
				Double Groove 1/8" Stem 60° Seat		S1016	V1018		
				Aerotype for S1016		卐AS1017			
23	CONTIN'T'L MTR.	1925-30	14H, 15H, P96	Own	6	S233			
24	CONTIN'T'L MTR.	1922-30	L4	Own	4	S101	V101	G193	G193
				Taper Grooved Stem		♂ Grooved Stem S608	V608		
25	CONTIN'T'L MTR.	1922-30	B5	Own	4	S129	V129	G193	G193
26	CONTIN'T'L MTR.	1914-27	B2	Own	4	S103	V103	G237	G237
27	CONTIN'T'L MTR.	1922-31	B7, P52	Own	4	S129	V129	G193	G193
28	CORBITT TRUCK	1936-38	Series 27, 26SD4, 18SD6, 2½-6T	Wauk. MZ	6	S712	V612	G413	G413
29	CORBITT TRUCK	1935-38	14B, 14BT, F15, 16SB2, F14, 1½-4T	Wauk. BK	6	S780	V781	G421	G421
						卐AS914			
30	CORBITT TRUCK	1935-38	F21, F22, 30SB2, 33SD4, 3-8T	Wauk. SRL	6	S676	V677	G330	G331
						卐AS754			
31	CORBITT TRUCK	1935-38	18D6T, 36SD2, 54SD4, 8-15T	Wauk. 6-125	6	AS740	V969		
32	CORBITT TRUCK	1935-38	Series 24, 32, F27, 40SD4, 26SD6, 35, 40, F27, 2½-10T	Wauk. SRK	6	S722	V723	G330	G331
						卐AS752			

*Indicates 1/32" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS165	VS19	R81			†C245	3⅝	4 1/16	2 7/16	3-3/16	P0119	.860	3	S	PB503	6
2		VS19	R34			†C288	3⅝	4⅜	2½	3-3/16	P519	1.125	3 3/16	S	PB532	6
3	IS132	VS221				†C980	3 1/16	5 1/16	3 3/16	3-3/16, 1-¼	P980	1.250	3 5/16	F		
4	IS143	VS92 ♂ Outer VS108 ♂ Inner	R34 R98			†C312	3¾	4½	2⅝	3-3/16	P085	1.125	3 1/16	S	PB532	6
5		VS198	R34			†C204	3¾	4⅞	2 1/16	4-3/16	P085	1.125	3 1/16	S	PB532	4
6	Out. VS92 In. VS108		R34			†C312	3¾	4½	2⅝	3-3/16	P085	1.125	3 1/16	S	PB532	6
7		VS148	R34			†C12	3¾	3¾	2⅛	3-3/16	P165	1.0937	3 1/32	S	PB502	4
8		VS148	R34			†C513	3¾	5⅛	2 1/16	3-3/16	P117	1.218	3⅜	S		
9	IS132	VS221				†C981	3⅞	5 1/16	3 3/16	3-3/16, 1-¼	P980	1.250	3 5/16	F		
10	IS165	VS20	R12	L598 Aerotype			3⅞	4	2¼	3-1/8, 1-5/32	P932	.859	3 1/32	F	PB746	4
11	IS165	VS160	R12	L523 Aerotype			3⅞	4 1/16	2 1/16	3-1/8, 1-3/16	P796	1.000	3⅜	F	PB685	4
12	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13 R159			†C709	4	4 3/32	2 1/32	3-3/16, 1-¼	P709	1.250	3 1/32	F	PB617	6
						†C821	4	5 1/32	2 1/32	2-3/16, 2-3/32, 1-¼	P709	1.250	3 1/32	F	PB617	6
13	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13 R159			†C714	4⅛	4 1/16	2⅞	3-3/16, 1-¼	P709	1.250	3 1/32	F	PB617	6
						†C822	4⅛	5 1/16	2⅞	2-3/16, 1-3/32, 1-¼	P709	1.250	3 1/32	F	PB617	6
14	IS148	VS198	R98			†C601	4⅛	4 1/16	2 1/32	3-¼	P601	1.250	3 5/16	S	PB579	6
15	IS137	VS73	R90			†C218	4⅛	5 1/16	3⅝	4-¼	P148	1.250	3 1/16	S	PB579	4
16		VS150	R34			†C249	4⅛	5¼	2 1/16	3-3/16	P014	1.218	3 1/16	S		
17		VS146	R34			†C33	4⅛	5	2 1/16	3-3/16	P014	1.218	3 1/16	S		
18	IS137	VS231	R12			†C842	4¼	4¾	2⅞	3-3/16, 1-¼	P277	1.500	3 1/32	F	PB574	4
						C473	4¼	4¾	2⅞	3-¼	P277	1.500	3 1/32	F	PB574	4
19	IS132	VS198	R98			†C602	4¼	4 5/16	2¾	3-¼	P601	1.250	3 5/16	S	PB579	6
20	IS137	VS198	R34			†C473	4¼	4¾	2⅞	3-¼	P277	1.500	3 1/32	F	PB574	4
						C842	4¼	4¾	2⅞	3-3/16, 1-¼	P277	1.500	3 1/32	F	PB574	4
21		VS198	R90 R91			†C587	4¼	6¼	3 1/16	4-¼	P623	1.375	3 1/16	S		
22	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13 R159			†C776	4⅜	4 1/16	2¾	3-3/16, 1-¼	P776	1.250	3 1/32	F	PB617	6
						†C823	4⅜	5 1/16	2¾	1-3/16, 2-3/32, 1-¼	P776	1.250	3 1/32	F	PB617	6
23	IS137	VS253	R90			†C514	4½	5 1/16	3⅝	4-¼	P299	1.500	3 1/16	S	PB583	6
24	IS140	VS67	R90 R91			†C158	4½	5 1/16	3⅝	4-¼	P149	1.375	4	S	PB580	4
25	IS156	VS70	R90			†C271	4¾	6⅛	3½	4-¼	P150	1.500	4¼	S	PB578	4
26	IS156	VS154				†C209	4¾	6⅛	3½	3-¼	P132	1.375	4 1/16	S	PB523	4
27	IS156	VS70	R90			†C418	5	5⅞	3 3/32	4-¼	P288	1.500	4 1/16	S	PB578	4
28	IS136	VS359	R28			C905(B)	4¼	4⅝	2 1/32	3-1/8, 1-3/16	P677	1.000	3⅝	O		
29	IS145	VS414	R149	†L605 Aerotype			3¾	4⅝	2 1/32	3-1/8, 1-3/16	P939	1.000	3 1/32	F	PB729	6
30	IS106	VS373	R28			†C782(B)	4⅜	4⅝	2 1/32	3-1/8, 1-3/16	P760	1.000	3⅞	O	PB529	12
				†L620 Aerotype			4⅜	5 1/32	2 1/32	3-1/8, 1-3/16	P947	1.375	4¼	AP	PB730	6
31	IS132			†L620 Aerotype			4⅜	5 3/32	2 1/32	3-1/8, 1-3/16	P947	1.375	4¼	AP	PB730	6
32	IS106	VS373	R28	†L569 Aerotype			4⅝	5¼	2⅞	3-3/32, 1-3/16	P877	1.375	4 31/32	AP	PB730	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES Exhaust	VALVES Intake	VALVE GUIDES Exh.	VALVE GUIDES Int.
1	CORBITT TRUCK	1935-38	F32, F35, 40SD6, 54SD6, 6-10T	Wauk. RB	6	S126 卐AS730 S660 S711	V126	G210	G209
				⅛" O. S. Head for S126					
				S126 with ½" Stem					
2	CORBITT TRUCK	1935-37	Series 15, F16, 24SB2, 18SD4, Series 22, F18, 18B, 2½-6T	Wauk. 6MK	6	S612 ♂1⅞" Head S712 ♂1 1/16" Head	V612	G413	G413
3	CORBITT TRUCK	1935-36	Series 12, 2, 3T	Wauk. 6MS	6	S712	V612	G413	G413
4	CORBITT TRUCK	1935-36	1348, 1½, 2T	Lyc. GFC	8	S822	V832	G168	G379
5	CORBITT TRUCK	1935-38	1146, 1½, 2T, 12B, F12	Lyc. WFC	6	S822	V832	G168	G379
6	CORBITT TRUCK	1932-36	12B6, 12W6, 15B6, 15W6, 15D6, 9B6T, 2-6T	Cont. E601	6	S775	V776		
7	CORBITT TRUCK	1932	12B6, 12W6, 2-3T	Cont. E600	6	S775	V776		
8	CORBITT TRUCK	1932-38	18, 18D6, 18W6, 12BT6, 21B, 2½-7T	Cont. E602	6	S775	V776		
9	CORBITT TRUCK	1932-38	24, 24D6, 24W6, 26D, 3-5T	Cont. E603	6	S775	V776		
10	CORBITT TRUCK	1933-34	8B4, 1½T	Cont. W10	4	S586	V587		
11	CORBITT TRUCK	1931-34	8B6, 10B6, 1½, 2T	Cont. 25A	6	S546	V392	G229	G229
12	CORBITT TRUCK	1931-38	33, 33W6, 28SW6, 15B6T, 27DT, 36SW6, 5-10T	Cont. 21R	6	S639 ♂⅜" Stem S673 S1015 S1016 卐AS1017	V639 45° Seat V674 V776 V1018	G313	G314 ♂1/16" I. D.
			Single Groove 1/16" Stem 45° Seat						
			Single Groove 1/16" Stem 60° Seat						
			Double Groove 1/16" Stem 60° Seat						
			Aerotype for 1016						
13	CORBITT TRUCK	1929-38	70S, 86, 24, 20, SW6, 22BT, 4-6T	Cont. 20R	6	S639 ♂⅜" Stem S673 S1015 S1016 卐AS1017	V639 45° Seat V674 V776 V1018	G313	G314 ♂1/16" I. D.
			Single Groove 1/16" Stem 45° Seat						
			Single Groove 1/16" Stem 60° Seat						
			Double Groove 1/16" Stem 60° Seat						
			Aerotype for S1016						
14	CORBITT TRUCK	1929-34	12W6, 12B6, 15B6, 2, 2½T	Cont. 16R	6	S639 ♂ ⅜" Stem S673 ♂1/16" Stem	V639 V674	G313	G314 ♂1/16" I. D.
15	CORBITT TRUCK	1929-33	7B6, 9B6, 10B6, 1½, 2½, 3T	Cont. 16C	6	S641	V344	G225	G225
16	CORBITT TRUCK	1929	70, 5T	Cont. B7	4	S129	V129	G193	G193
17	CORBITT TRUCK	1925-29	R, A, 84, 3, 4T	Cont. L4	4	S101	V101	G193	G193
18	CORBITT TRUCK	1925-29	CB54, 2, 2½T	Cont. K4	4	S107	V107	G193	G193
19	CORBITT TRUCK	1928	20, 21, 25, 36, 1, 1½T	Cont. 12C	6	S641	V344	G225	G225
20	CORBITT TRUCK	1927	20, 21, 1T	Cont. 20L	6	S357	V358	G184	G184
21	CORBITT TRUCK	1926-27	25, 1¼T	Cont. S4	4	S263	V263		
22	CORD	1930-32	L29, L30	Lyc. FDA	8	S318 卐AS855	V319	G168	G168
23	CUMMINS DIESEL	1934-38	HA4, HA6	Own	4-6	S1012 卐AS962	S1012 卐AS962	G403	G403
24	CURTISS AIRPLANE		OX5, OX6, OXX5	Own	8	S218 S607	S218	G269	G269
				⅛" O. S. Head for S218					
25	CURTISS AIRPLANE		OX5, High Comp.	Own	8	S218 S607	S218	G269	G269
				⅛" O. S. Head for S218					
26	DAVIS	1928	99	Cont. 14S	8	S432	V432	G258	G258
27	DAVIS	1927	92	Cont. 28L	6	S357	V358	G184	G184
28	DAY ELDER TRK.	1935-38	241, 331D, 5-8T	Herc. RXC	6	S659	V659	G267	G266
29	DAY ELDER TRK.	1933-38	110, 111, 211T, 2½-4T	Herc. JXC	6	S701 卐AS772	V702	G386	G386

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS121					C814(B) ♂Offset Bosses	3	5⅝	3 1/32	4-1/16	P814	1.375	4 7/16	O		
2	IS111 IS136	VS359	R28	†L570 Aerotype		C808(B)	4⅛ 4⅛	4½ 4⅝	2 11/32 2 11/32	3-⅛, 1-3/16 3-1/16	P878 P677	1.000 1.000	3 23/32 3⅝	AP O	PB729	6
3	IS136	VS359	R28								P835	1.000	3 23/32	AP	PB729	6
4	IS102	VS83	R101		L539		3 1/16	3¾	2¼	3-⅛, 1-3/16	P730	.875	2½	O		
5	IS102	VS83	R101		L539		3 1/16	3¾	2¼	3-⅛, 1-3/16	P730	.875	2½	O		
6	IS132	VS221				†C981	3⅞	5 5/16	3 3/16	3-3/16, 1-¼	P980	1.250	3 5/16	F		
7	IS132	VS221				†C980	3 11/16	5 5/16	3 3/16	3-3/16, 1-¼	P980	1.250	3 5/16	F		
8	IS114	VS221									P709	1.250	3 13/32	F		
9	IS114	VS221									P709	1.250	3 13/32	F		
10	IS165	VS160	R12	L523 Aerotype			3⅞	4 7/16	2 5/16	3-⅛, 1-5/16	P796	1.000	3⅝	F	PB685	4
11	IS105		R12		L389	†C596	3⅝	3 11/16	2 5/16	3-⅛, 1-5/32	P594	.859	2⅞	F	PB600	6
12	IS130	VS221 ♂Outer VS283 ♂Inner	R13 R159			†C776	4⅜	4 13/16	2¾	3-3/16, 1-¼	P776	1.250	3 31/32	F	PB617	6
						†C823	4⅜	5 1/16	5¾	1-3/16, 2-5/32, 1-¼	P776	1.250	3 31/32	F	PB617	6
13	IS130	VS221 ♂Outer VS283 ♂Inner	R13 R159			†C714	4⅛	4 13/16	2⅜	3-3/16, 1-¼	P709	1.250	3 13/32	F	PB617	6
						†C822	4⅛	5 1/16	2⅜	2-3/16, 1-5/32, 1-¼	P709	1.250	3 13/32	F	PB617	6
14	IS130	VS221 ♂Outer VS283 ♂Inner	R13			†C709	4	4 23/32	2 27/32	3-3/16, 1-¼	P709	1.250	3 13/32	F	PB617	6
						†C821	4	5 5/32	2 27/32	1-3/16, 2-5/32, 1-¼	P709	1.250	3 13/32	F	PB617	6
15	IS165	VS231	R12		†L389	C596	3⅝	3 11/16	2 5/16	3-⅛, 1-5/32	P594	.859	2⅞	F	PB600	6
16	IS156	VS70	R90			†C418	5	5⅞	3 3/32	4-¼	P288	1.500	4 1/16	S	PB578	4
17	IS140	VS67	R90			†C158	4½	5 1/16	3⅝	4-¼	P149	1.375	4	S	PB580	4
18	IS137	VS73	R90			†C218	4⅛	5 1/16	3⅜	4-¼	P148	1.250	3 11/16	S	PB579	4
19	IS165	VS231	R12			†C479	3¼	3¾	2 5/16	3-3/16	P282	1.000	2 13/16	S	PB558	6
					L433		3¼	3¾	2 5/16	3-⅛, 1-5/32	P518	1.000	2¾	F	PB558	6
20	IS100	VS251	R12	L387	†L367	C457	2¾ 2¾	3⅜ 3⅜	1 15/16 1 15/16	2-⅛, 1-3/16 3-3/16	P319 P279	.734 .734	2⅝ 2 1/16	F S	PB552 PB552	6 6
21	IS137	VS198	R34			†C473	4¼	4¾	2⅞	3-¼	P277	1.500	3 15/32	F	PB574	4
22	IS103	VS83	R1		†L397		3¼	3 11/16	2 7/16	2-⅛, 2-5/16	P613	.875	2 29/32	O		
23		VS413	R154								P991	1.999	4 7/16	S		
24																
25				L415			4	4⅞	2⅞	2-5/32	P621	.875	3⅝	O		
26	IS101 In. VS101 VS250				†L399		3	3⅝	2⅛	3-⅛, 1-3/16	P615	.859	2 15/32	F	PB634	8
27	IS100	VS202	R12			C472	2⅞	3 3/32	1 23/32	2-⅛, 1-3/16	P701	.734	2 13/32	F	PB552	6
28	IS130	VS334														
29	IS131	VS353	R126			†C813(B)	3¾	4 1/16	2⅛	3-3/16	P813	1.000	3⅝	O		
				†L563 Aerotype			3¾	4⅛	2⅛	3-⅛, 1-3/16	P813	1.000	3⅝	O		

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	DAY ELDER TRK.	1933-38	85, 86, 150, 151, 2-3T	Herc. JXB	6	S701 卐AS772	V702	G386	G386
2	DAY ELDER TRK.	1933-38	130, 131, 251T, 3-5T	Herc. WXC	6	S624 卐AS970	V625	G267	G267
3	DAY ELDER TRK.	1933-38	160, 161, 200, 201, 281T, 301D, 3-7T	Herc. WXC3	6	S624 卐AS970	V625	G267	G267
4	DAY ELDER TRK.	1933-38	75, 76, 1½T	Herc. JXA	6	S701 卐AS772	V702	G386	G386
5	DAY ELDER TRK.	1932	60, 1T	Cont. 25A	6	S546	V392	G229	G229
6	DAY ELDER TRK.	1931-32	130, 2½T	Cont. 16R	6	S639 ♂⅜" Stem	V639		
				45° Seat卐		S673 ♂$\frac{11}{32}$" Stem	V674	G313 ♂$\frac{11}{32}$" I. D.	G314
7	DAY ELDER TRK.	1930-32	KF, 240, 285, 345	Cont. 21R	6	S673	V674	G313	G314
8	DAY ELDER TRK.	1929-32	MF, GF, HF, HBF, 85, 110	Cont. 16C	6	S641	V344	G225	G225
9	DAY ELDER TRK.	1929	J6, 3T	Buda DW6	6	S610	V610	G236	G236
10	DAY ELDER TRK.	1928	M, HB6, 1, 2T	Cont. 12C	6	S641	V344	G225	G225
11	DAY ELDER TRK.	1926-27	L, 5T	Buda BTU	4	S221	V221	G203	G203
12	DAY ELDER TRK.	1925-27	J, 3T	Buda EBU	4	S167	V167	G201	G201
13	DAY ELDER BUS	1932	30A, 30 Pass.	Cont. 21R	6	S673	V674	G313	G314
14	DAY ELDER BUS	1925-31	20-25 Pass.	Cont. 6B	6	S287 ♂Grooved Stem	V287	G189	G189
				Taper Grooved Stem卐		S288	V288		
15	DEERE TRACTOR		See John Deere						
16	DELCO	1920-29	Light Plant	Own	4				
17	DELCO		850	Own	2	S685	S685		
18	DE SOTO	1938	S5	Own	6	S940 卐AS973	V941	G337	G338
19	DE SOTO	1937	S3	Own	6	S940 卐AS973	V941	G337	G338
20	DE SOTO	1936	S1, S2	Own	6	S888 卐AS906	V889	G408	G341
21	DE SOTO	1934-35	SE, SF, SG	Own	6	S594 卐AS854	V595	G104	G341
22	DE SOTO	1933	SD	Own	6	S594 卐AS854	V595	G104	G341
23	DE SOTO	1932	SC	Own	6	S549	V550	G104	G341
24	DE SOTO	1930-31	Straight Eight	Own	8	S521	V521	G104	G341
25	DE SOTO	1931	SA Six after Eng. No. 7971	Own	6	S549	V550	G104	G341
26	DE SOTO	1931	SA Six after Car No. 5011801 and Before Eng. No. 7971	Own	6	*S443	V542	G104	G341
27	DE SOTO	1930	CK to Car No. 5011801	Own	6	*S443	*V443	G104	G341
28	DE SOTO	1929	K	Own	6	*S443	*V443	G104	G105
29	DE VAUX	1931	6-75	Cont. 40A	6	S546	V553	G229	G229
30	DIAMOND T TRK.	1934-38	352, 360, 609, 614, 2½-5T	Herc. JXD	6	S701 卐AS772	V702	G386	G386
31	DIAMOND T TRK.	1935-36	412B, 3, 4T	Herc. WXLC	6	S624 卐AS970	V625	G267	G267
32	DIAMOND T TRK.	1935-38	512B, 412DR, 512DR, 4-6½T	Herc. WXLC3	6	S624 卐AS970	V625	G267	G267

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS: STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS: Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS: Stock No.	No. Used
1	IS131	VS353	R126			†C845(B)	3⅝	4⅜	2⅛	3-⅛, 1-⅛	P845	1.000	3¼	O		
				L562 Aerotype			3⅝	4⅛	2⅛	3-⅛, 1-⅛	P845	1.000	3¼	O		
2	IS109	VS334	R146			†C785(B)	4	4⅛	2⅛	4-⅛	P785	1.125	3⅝	O		
				†L571 Aerotype			4	4⅜	2⅛	3-⅛, 1-⅛	P785	1.125	3⅝	O		
3	IS109	VS334	R146			C920(B)	4¼	4⅛	2⅛	4-⅛	P785	1.125	3⅝	O		
4	IS131	VS353	R126	L561 ♂ Aerotype		†C812(B)	3⅝	4⅜	2⅛	3-⅛, 1-⅛	P812	1.000	2⅞	O		
5	IS105		R12		L389	†C596	3⅝	3⅛	2⅛	3-⅛, 1-⅛	P594	.859	2⅞	F	PB600	6
6	IS130	VS221 ♂ Outer VS283 ♂ Inner	R18			†C709	4	4⅛	2⅛	3-⅛, 1-¼	P709	1.250	3⅛	F	PB617	6
						†C821	4	5⅛	2⅛	1-⅛, 2-⅛, 1-¼	P709	1.250	3⅛	F	PB617	6
7	IS130 In.	VS221 VS283				†C776	4⅜	4⅛	2¾	3-⅛, 1-¼	P776	1.250	3⅛	F	PB617	6
						†C823	4⅜	5⅛	2¾	1-⅛, 2-⅛, 1-¼	P776	1.250	3⅛	F	PB617	6
8	IS165	VS231	R12		†L389	†C596	3⅝	3⅛	2⅛	3-⅛, 1-⅛	P594	.859	2⅞	F	PB600	6
9	IS143	VS242	R7			†C721	3¾	4⅜	2⅛	4-⅛	P721	1.375	3	F	PB589	6
10	IS165	VS231	R12			†C479	3¼	3¾	2⅛	3-⅛	P282	1.000	2⅛	S	PB558	6
					L433		3¼	3¾	2⅛	3-⅛, 1-⅛	P518	1.000	2¾	F	PB558	6
11	IS163	VS247	R6			†C265	5	6⅛	3¼	4-¼	P129	1.375	4⅛	S	PB564	4
12	IS137		R6			†C109	4¼	5⅛	2⅝	4-¼	P080	1.125	3⅛	S	PB517	4
13	IS130 In.	VS221 VS283				†C776	4⅜	4⅛	2¾	3-⅛, 1-¼	P776	1.250	3⅛	F	PB617	6
						†C823	4⅜	5⅛	2¾	1-⅛, 2-⅛, 1-¼	P776	1.250	3⅛	F	PB617	6
14	IS143 In.	VS92 ♂ Outer VS108	R24 R98			†C312	3¾	4½	2⅝	3-⅛	P085	1.125	3⅛	F	PB532	6
15																
16				L403			3	3⅛	1⅛	3-⅛	P988	.750	2⅛	AP		
17				†L545			2½	3⅛	1⅛	3-⅛	P848	.749	2⅛	AP		
18	IS131	VS422	R101	†L616			3⅝	3⅞	2	2-⅛, 2-⅛	P594	.859	2⅞	F	PB671	6
19	IS131	VS412	R101	†L616			3⅝	3⅞	2	2-⅛, 2-⅛	P594	.859	2⅞	F	PB671	6
20	IS125	VS337	R101	†L548 Cam Ground Type			3⅝	3⅞	2	2-⅛, 2-⅛	P594	.859	2⅞	F	PB671	6
				L590 Same as L548 except relieved for round grinding.												
				L616 U Slot Type			3⅝	3⅞	2	2-⅛, 2-⅛						
21	IS125	VS337	R101	†L548 Cam Ground Type			3⅝	3⅞	2	2-⅛, 2-⅛	P594	.859	2⅞	F	PB671	6
				L590 Same as L548 except relieved for round grinding.												
				L616 U Slot Type			3⅝	3⅞	2	2-⅛, 2-⅛						
22	IS125	VS287	R101		†L507		3¼	3⅛	2	Fac. Dup.	P731	.859	2⅛	F	PB671	6
					L508		3¼	3⅛	2	3-⅛, 1-⅛	P731	.859	2⅛	F	PB671	6
23	IS125	VS287	R66		†L492		3¼	3¾	2⅛	Fac. Dup.	P731	.859	2⅛	F	PB671	6
					L493		3¼	3¾	2⅛	3-⅛, 1-⅛	P731	.859	2⅛	F	PB671	6
24	IS101	VS263 VS287	R10		†L478		2⅞	3⅛	2	Fac. Dup.	P701	.734	2⅛	F	PB636	8
					L475		2⅞	3⅛	2	3-⅛, 1-⅛	P701	.734	2⅛	F	PB636	8
25	IS101	VS287	R66		†L494		3¼	3⅛	2⅛	Fac. Dup.	P731	.859	2⅛	F	PB671	6
					L495		3¼	3⅛	2⅛	3-⅛, 1-⅛	P731	.859	2⅛	F	PB671	6
26	IS101	VS287	R10		†L494		3¼	3⅛	2⅛	Fac. Dup.	P731	.859	2⅛	F	PB671	6
					L495		3¼	3⅛	2⅛	3-⅛, 1-⅛	P731	.859	2⅛	F	PB671	6
27	IS101	VS262	R10		†L434		3⅛	3⅛	2	Fac. Dup.	P232	.812	2⅛	O		
				L232	L366	C508(B)	3⅛	3⅛	2	3-⅛	P232	.812	2⅛	O		
28	IS101	VS180	R10		†L388		3	3⅛	2	Fac. Dup.	P120	.749	2⅛	O		
				L120	L365	C391(B)	3	3⅛	2	3-⅛	P120	.749	2⅛	O		
29	IS135		R12		†L389	C596	3⅝	3⅛	2⅛	3-⅛, 1-⅛	P594	.859	2⅞	F	PB600	6
30	IS131	VS353	R126	†L603 Aerotype			4	4⅛	2⅛	3-⅛, 1-⅛	P937	1.000	3½	O		
31	IS109	VS334	R146													
32	IS109	VS334	R146													

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Di-Do Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	DIAMOND T TRK.	1929-34	410A, 410B, 425, 550, 551, 502, 411B, 3T	Herc. WXC	6	S624 卐AS970	V625	G267	G267
2	DIAMOND T TRK.	1932-38	110, 312, 350, 351B, 351C, 607,, 612, 320, 353, 351DR, 375, 2-4½T	Herc. JXC	6	S701 卐AS772	V702	G386	G386
3	DIAMOND T TRK.	1932-38	220, 225B, 310, 311B, 311C, 316, 262, 325DR, 221, 1½-4T, 406, 507, 611, 221S, 244S, 313	Herc. JXB	6	S701 卐AS772	V702	G386	G386
4	DIAMOND T TRK.	1932-38	216B, 210SF, 210FF, 225, 260, 210, 211A, 226, 227, 242, 401, 404, 405, 243, 212, 212AS, 212BS, 228S, 1½-3T	Herc. JXA	6	S701 卐AS772	V702	G386	G386
5	DIAMOND T TRK.	1928-35	600, 700, 801, 603A, 740A, 3-6T	Herc. YXC	6	S619 ♂ Drilled Stem S659	V619 V659	G267	G266
				Slotted Stem*					
6	DIAMOND T TRK.	1933	525, 5T	Herc. WXC2	6	S624 卐AS970	V625	G267	G267
7	DIAMOND T TRK.	1929-32	302, 303, 303F, 410A	Herc. WXB	6	S624 卐AS970	V625	G267	G267
8	DIAMOND T TRK.	1931-34	504, 506, 506A, 411DR, 511B, 511DR, 525, 2½-5T	Herc. WXC3	6	S624 卐AS970	V625	G267	G267
9	DIAMOND T TRK.	1931-34	740, 740A, 1201, 1201A, 606B, 3-6T	Herc. RXB	6	S659	V659	G267	G266
10	DIAMOND T TRK.	1929-31	1000, 1200, 602, 606, 3-6T	Herc. YXC2	6	S659	V659	G267	G266
11	DIAMOND T TRK.	1931	1601, 1603, 8T	Wauk. 6RB	6	S126 卐AS730 S660	V126	G210	G209
				⅛" O. S. Head for S126*					
12	DIAMOND T TRK.	1927-28	S2, 5, 7½T	Herc. G	4	S600	V600	G414	G414
13	DIAMOND T TRK.	1927-28	U6, 2½, 3, 3½T	Herc. L	4	S600	V600	G414	G414
14	DIAMOND T TRK.	1927-28	150, 151, 1T	Cont. 18E	6	S391	V392	G229	G229
15	DIAMOND T TRK.	1927-28	TU4, TK2, 2½, 3½, 5T	Herc. K	4	S600	V600	G414	G414
16	DIAMOND T TRK.	1927	T76, T3, T4, 1, 1½T	Herc. OXA	4	S199 S680	V199	G266	G266
				⅛" O. S. Head for S199*					
17	DIVCO TRUCK	1929	B29, 1½T	Cont. W9	4	S717	V44	G184	G184
18	DIVCO TRUCK	1926-32	A, B, C, G, H, 1, 1½T	Cont. H8, H9	4	S717	V44	G184	G184
19	DODGE	1935-38	DU, D2, D5, D8	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
20	DODGE	1934	DR, DS	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
21	DODGE	1933	DP, DQ after No. DP52977	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
22	DODGE	1933	DP, DQ to No. DP52977	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
23	DODGE	1933	DO	Own	8	S596	V597	G104	G341
24	DODGE	1932	DK	Own	8	S551	V552	G104	G341
25	DODGE	1932	DL	Own	6	S549	V550	G104	G341
26	DODGE	1931	DG	Own	8	S521	V521	G104	G341
27	DODGE	1931	DH	Own	6	*S443	V542	G104	G341

*Indicates ¼" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS109	VS334	R146	†L571 ♂ Aerotype			4	4 5/8	2 1/16	3-1/8, 1-3/16	P785	1.125	3 5/8	O		
				♂ Use with Rod Number 18890CSY		†C785(B)	4	4 1/16	2 1/16	4-3/16	P785	1.125	3 5/8	O		
						♂ Use with Rod Number 18790CSY										
2	IS131	VS353	R126	†L563 ♂ Aerotype			3 3/4	4 1/8	2 1/8	3-1/8, 1-3/16	P813	1.000	3 3/8	O		
						C813(B)	3 3/4	4 1/8	2 1/8	3-1/8, 1-3/16	P813	1.000	3 3/8	O		
3	IS131	VS353	R126	†L562 ♂ Aerotype			3 5/8	4 1/16	2 1/16	3-1/8, 1-3/16	P845	1.000	3 5/32	O		
						C845(B)	3 5/8	4 1/8	2 1/16	3-1/8, 1-3/16	P845	1.000	3 5/32	O		
4	IS131	VS353	R126	L561 ♂ Aerotype		†C812(B)	3 3/8	4 3/8	2 1/16	3-1/8, 1-3/16	P812	1.000	2 31/32	O		
5	IS130	VS334				†C786(B)	4 3/8	4 7/8	2 5/16	4-3/16	P786	1.250	3 1/16	O	PB672	12
			R146													
6	IS109	VS334	R146			†C811(B)	4 1/16	4 5/16	2 5/16	4-3/16	P785	1.125	3 5/8	O		
7	IS109	VS334	R146			†C784(B)	3 3/4	4 5/16	2 5/16	4-3/16	P784	1.125	3 3/8	O		
8	IS109	VS334	R146			C920(B)	4 1/4	4 5/16	2 5/16	4-3/16	P785	1.125	3 5/8	O		
9	IS130	VS334	R146	†L604 ♂ Aerotype			4 1/2	4 7/8	2 5/16	3-1/8, 1-3/16	P786	1.250	3 1/16	O		
10	IS130	VS334	R146			†C787(B)	4 1/2	4 7/8	2 5/16	4-3/16	P786	1.250	3 1/16	O	PB672	12
				†L604 ♂ Aerotype			4 1/2	4 7/8	2 5/16	3-1/8, 1-3/16	P786	1.250	3 1/16	O		
11	IS121					†C814(B)	5	5 3/8	3 3/32	4-3/16	P814	1.375	4 7/16	O		
12	IS140	VS203	R89			†C682(B)	4 3/4	5 1/4	2 1/2	4-3/16	P682	1.500	4 1/4	O		
13	IS140	VS203	R89			†C681(B)	4 1/2	5 1/4	2 1/2	4-3/16	P681	1.500	4	O		
14	IS135	VS231	R12		†L389	C596	3 3/8	3 1/16	2 5/16	3-1/8, 1-3/32	P594	.859	2 7/8	F	PB600	6
15	IS140	VS203	R89			†C680(B)	4 1/4	5 1/4	2 1/2	4-3/16	P680	1.500	3 3/4	O		
16	IS132	VS205	R14			†C313(B)	4	4 7/8	2 5/16	2-1/4	P040	1.375	3 1/2	O	PB586	8
17	IS165	VS20	R12	L598 ♂ Aerotype			3 7/8	4	2 1/4	3-1/8, 1-3/32	P932	.859	3 11/32	F	PB746	4
18	IS165	VS20	R12	L381	†L368	C442	3 3/8	4	1 15/16	2-1/8, 1-3/16	P209	.859	2 29/32	F	PB546	4
19	IS125	VS304	R101		†L556		3 1/4	3 11/16	2	2-1/8, 2-3/32	P731	.859	2 1/4	F	PB671	6
20	IS125	VS304	R101		†L537		3 1/4	3 11/16	2	Fac. Dup.	P731	.859	2 1/4	F	PB671	6
					L508		3 1/4	3 11/16	2	3-1/8, 1-3/32	P731	.859	2 1/4	F	PB671	6
					L556		3 1/4	3 11/16	2	2-1/8, 2-3/32	P731	.859	2 1/4	F	PB671	6
21	IS125	VS304	R101		†L529		3 1/8	3 11/16	2	Fac. Dup.	P755	.859	2 5/8	F	PB671	6
					L506		3 1/8	3 11/16	2	3-1/8, 1-3/32	P755	.859	2 5/8	F	PB671	6
22	IS125	VS304	R101		†L505		3 1/8	3 11/16	2	Fac. Dup.	P755	.859	2 5/8	F	PB671	6
					L506		3 1/8	3 11/16	2	3-1/8, 1-3/32	P755	.859	2 5/8	F	PB671	6
23	IS125	VS294	R101		†L492		3 1/4	3 3/4	2 1/16	Fac. Dup.	P731	.859	2 1/4	F	PB671	8
					L493		3 1/4	3 3/4	2 1/16	3-1/8, 1-3/32	P731	.859	2 1/4	F	PB671	8
24	IS101	VS294	R66		†L492		3 1/4	3 3/4	2 1/16	Fac. Dup.	P731	.859	2 1/4	F	PB671	8
					L493		3 1/4	3 3/4	2 1/16	3-1/8, 1-3/32	P731	.859	2 1/4	F	PB671	8
25	IS125	VS294	R66		†L507		3 1/4	3 11/16	2	Fac. Dup.	P731	.859	2 1/4	F	PB671	6
					L508		3 1/4	3 11/16	2	3-1/8, 1-3/32	P731	.859	2 1/4	F	PB671	6
					L556		3 1/4	3 11/16	2	2-1/8, 2-3/32	P731	.859	2 1/4	F	PB671	6
26	IS101	VS294	R10		†L481		3	3 11/16	2	Fac. Dup.	P720	.734	2 1/32	F	PB636	8
					L482		3	3 11/16	2	3-1/8, 1-3/32	P720	.734	2 1/32	F	PB636	8
27	IS125	VS294	R10		†L492		3 1/4	3 3/4	2 1/16	Fac. Dup.	P731	.859	2 1/4	F	PB671	6
					L493		3 1/4	3 3/4	2 1/16	3-1/8, 1-3/32	P731	.859	2 1/4	F	PB671	6

(B) = Piston is bushed.
8 = Set Screw type piston pin.
† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.
O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Do-Do Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	DODGE	1930	DC	Own	8	S521	V521	G104	G341
2	DODGE	1930	DD	Own	6	*S443	*V443	G104	G105
3	DODGE	1928-29	Senior Six	Own ⅛" O. S. Head for S388	6	S388 S554	V389	G101	G101
4	DODGE	1928	Senior Six (Early)	Own ⅛" O. S. Head for S388	6	S388 S554	V389	G101	G101
5	DODGE	1928-29	Victory, Standard, DA	Own	6	S426	V427	G102 G103	G102 G103 ♂ 1/64" O. S.
6	DODGE	1915-28	All Four Cyl.	Own ⅛" O. S. Head for S29	4	*S29 S364	*V29	G100	G100
7	DODGE TRUCK	1938	RC, ½T; RD15-16-20-21, ¾-1T; RE15-16-17-20-21-22-30-31-32, ¾-1½T; RF35-36-37, RFD38, RF39, 1½T; RG40-41-42-43, RH45-46-47-48, 1½-2T	Own	6	S940 卐AS973	V941	G337	G338
8	DODGE TRUCK	1938	ML50-51-52-53, 2T; MK60-61-62-63, 3T; RL50-51-52-53, 2T; RK60-61-62-63, 3T; RO55-56-57-58, 2T; RP65-66-67-68, 3T	Own	6	AS743 卐AS913	V744	G391	G391
9	DODGE TRUCK	1937	MC, MD15-16-20-21; ME15-16-17-20-21-22-30-31-32; MF28-35-36-37-38-39; MG40-41-42-43; MH-29-45-46-47-48; ½-2T	Own	6	S940 卐AS973	V941	G337	G338
10	DODGE TRUCK	1936-37	LH45-46-47-48; LH29-30; LG40-41-42-43; 1, 1½, 2T	Own	6	S888 卐AS906	V889	G408	G341
11	DODGE TRUCK	1934-37	KC, KCL after 8036295, LC, LCUSA, ½T	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
12	DODGE TRUCK	1935-36	K32V, K33V, K34V, K19V, K34NC1, LF35, LF36, LF37, LF28	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
13	DODGE TRUCK	1935-36	K50V, K51V, K52V, K60V, K61V, K62V	Own	6	AS743 卐AS913	V744	G391	G391
14	DODGE TRUCK	1934-36	KH Series, 15 to 32, KH16V to KH33V, LE30, LE31, LE32, LE15, LE16, LE17, LE20, LE21, LE22	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
15	DODGE TRUCK	1934-35	K35 to 38, K45 to 48, K35V to K38V, K45V, to K48V	Own	6	S594 卐AS854	V595	G408	G341
16	DODGE TRUCK	1934	KC, KCL from 8029154 to 8036295 and after 9202456	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
17	DODGE TRUCK	1934	KC, KCL to 8029154 and 9202456	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
18	DODGE TRUCK	1934-35	K50, K51, K52, K70, K71, K72	Own	6	AS743 卐AS913	V744	G391	G391
19	DODGE TRUCK	1934-35	K30, K31, K32, K33, K34, K20, K21	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS — STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS101	VS294	R10		†L478		2⅞	3 11/16	2	Fac. Dup.	P701	.734	2 13/16	F	PB636	8
					L475		2⅞	3 11/16	2	3-3/16, 1-5/16	P701	.734	2 13/16	F	PB636	8
2	IS125	VS294	R10		†L434		3⅛	3 11/16	2	Fac. Dup.	P232	.812	2 13/16	O		
				L232	L366	C508(B)	3⅛	3 11/16	2	3-⅛	P232	.812	2 13/16	O		
3	IS107	VS160	R13		†L389	C596	3⅜	3 11/16	2 1/16	3-⅜, 1-5/16	P594	.859	2⅞	F	PB600	6
4	IS107	VS160	R13		†L372		3¼	3 11/16	2 1/16	3-⅜, 1-5/16	P578	.859	2¾	F	PB600	6
5	IS105	VS181	R13		†L389	C596	3⅜	3 11/16	2 1/16	3-⅜, 1-5/16	P594	.859	2⅞	F	PB600	6
6	IS112	VS84	R12	†L25			3⅜	4⅜	2 1/16	4-⅜	P025	.8125	3⅜	S	PB504	4
					†L370		3⅜	4⅜	2 1/16	3-⅜, 1-5/16	P025	.8125	3⅜	S	PB504	4
						C84	3⅜	4⅜	2 1/16	3-⅜	P025	.8125	3⅜	S	PB504	4
7	IS131	VS422	R101	†L616	U Slot Type		3⅜	3⅞	2	2-⅜, 2-5/16	P594	.859	2⅞	F	PB671	6
				L623	Solid Skirt		3⅜	3⅞	2	2-⅜, 2-5/16	P594	.859	2⅞	F	PB671	6
8	IS124	VS129	R100		†L641		3¾	4 3/16	2 1/16	2-⅜, 2-1/16	P972	1.125	3¼	F	PB757	6
9		VS412	R101	†L616	U Slot Type		3⅜	3⅞	2	2-⅜, 2-5/16	P594	.859	2⅞	F	PB671	6
				L623	Solid Skirt		3⅜	3⅞	2	2-⅜, 2-5/16	P594	.859	2⅞	F	PB671	6
				L548	T Slot Type		3⅜	3⅞	2	2-⅜, 2-5/16	P594	.859	2⅞	F	PB671	6
				L590 Same as L548 except relieved for round grinding.												
10	IS108	VS337	R101	†L548	Cam Ground Type		3⅜	3⅞	2	2-⅜, 2-5/16	P594	.859	2⅞	F	PB671	6
				L590 Same as L548 except relieved for round grinding.												
				L623	Solid Skirt		3⅜	3⅞	2	2-⅜, 2-5/16	P594	.859	2⅞	F	PB671	6
				†L616	U Slot Type		3⅜	3⅞	2	2-⅜, 2-5/16	P594	.859	2⅞	F	PB671	6
11	IS125	VS304	R101	†L543	Cam Ground Type		3⅛	3 11/16	2	2-⅜, 2-5/16	P755	.859	2⅝	F	PB671	6
				L588 Same as L543 except relieved for round grinding.												
				†L612	U Slot Type		3⅛	3 11/16	2	2-⅜, 2-5/16	P755	.859	2⅝	F	PB671	6
12	IS125	VS304	R101		†L556		3¼	3 11/16	2	2-⅜, 2-5/16	P731	.859	2 11/16	F	PB671	6
13		VS370	R100		†L445		3⅝	4 1/16	2 1/16	Fac. Dup.	P668	1.000	3¼	O		
					L535		3⅝	4 1/16	2 1/16	4-⅛, 1-3/32	P668	1.000	3¼	O		
14	IS125	VS304	R101	†L543	Cam Ground Type		3⅛	3 11/16	2	2-⅜, 2-5/16	P755	.859	2⅝	F	PB671	6
				L588 Same as L543 except relieved for round grinding.												
				†L612	U Slot Type		3⅛	3 11/16	2	2-⅜, 2-5/16						
15	IS125	VS337	R101	†L548	Cam Ground Type		3⅜	3⅞	2	2-⅜, 2-5/16	P594	.859	2⅞	F	PB671	6
				L590 Same as L548 except relieved for round grinding.												
				L623	Solid Skirt		3⅜	3⅞	2	2-⅜, 2-5/16						
				L616	U Slot Type		3⅜	3⅞	2	2-⅜, 2-5/16						
16	IS125	VS304	R101		†L537		3¼	3 11/16	2	Fac. Dup.	P731	.859	2 11/16	F	PB671	6
					L508		3¼	3 11/16	2	3-⅛, 1-5/32	P731	.859	2 11/16	F	PB671	6
17	IS125	VS304	R101	†L524	Cam Ground Type		3⅛	3 11/16	2	3-⅛, 1-5/32	P755	.859	2⅝	F	PB671	6
				L583 Same as L524 except relieved for round grinding.												
				L543	Cam Ground Type		3⅛	3 11/16	2	2-⅜, 2-5/16	P755	.859	2⅝	F	PB671	6
				L588 Same as L543 except relieved for round grinding.												
				L612	U Slot Type		3⅛	3 11/16	2	2-⅜, 2-5/16						
18		VS370	R100		†L445		3⅝	4 1/16	2 1/16	Fac. Dup.	P668	1.000	3¼	O		
					L535		3⅝	4 1/16	2 1/16	4-⅛, 1-3/32	P668	1.000	3¼	O		
19	IS125	VS304	R101		†L537		3¼	3 11/16	2	Fac. Dup.	P731	.859	2 11/16	F	PB671	6
					L508		3¼	3 11/16	2	3-⅛, 1-5/32	P731	.859	2 11/16	F	PB671	6

(B) = Piston is bushed.
S = Set Screw type piston pin.
F = Full Floating type piston pin.
† = Type of piston used as original equipment.
AP = Aluminum plugged piston pin.
O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Do-Du Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	DODGE TRUCK	1933-34	HCL after Eng. No. DTDP1001 KC	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
2	DODGE TRUCK		HC, HCL to Eng. No. DTDP1001	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
3	DODGE TRUCK		G80	Own	8	S575	V535	G321	G109
4	DODGE TRUCK		UG43, UG44, UG45	Own	4	S573	V574	G106	G107
5	DODGE TRUCK		H30, H31 after Eng. T2-6154	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
6	DODGE TRUCK		G30, G31 after Eng. No. 8482340, H30, H31, to Eng. No. T2-6154	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
7	DODGE TRUCK		H43, H44 after Eng. No. T3-2183	Own	6	S594 卐AS854	V595	G104	G341
8	DODGE TRUCK		H43, H44 to Eng. No. T3-2183	Own	6	S594 卐AS854	V595	G104	G341
9	DODGE TRUCK		G30, G31 to Eng. No. 8482340, G43, G44	Own	6	S549	V550	G104	G341
10	DODGE TRUCK		UG30, UG31, UG32	Own	4	S573	V574	G106	G107
11	DODGE TRUCK	1932-33	F40, F41, F42, F60, F61, F62 from Eng. No. Z3568 to Z4610	Own	6	AS742	V667	G112	G113
12	DODGE TRUCK	1929-31	F40, F41, F42, F60, F61, F62 to Eng. No. Z3040	Own	6	S666	V667	G112	G113
13	DODGE TRUCK	1929-31	F10, F30, F31 to Eng. No. 6107	Own	6	*S443	*V443	G104	G341
14	DODGE TRUCK	1929-31	UF10, UF30, UF31, UF32	Own	4	S72	V536	G106	G107
15	DODGE TRUCK	1929-30	Merchants Exp. after Eng. No. UT20001, U124, U133 after Eng. No. UT50001	Own	4	S72	V536	G106	G107
16	DODGE TRUCK	1929	Merchants Exp. to Eng. No. UT20001, U124, U133 to Eng. No. UT50001	Own	4	S72	V424	G106	G107
17	DODGE TRUCK	1930-32	BE, DET, IE, LE, ME, SE, DA120, DA130, DA133, DA140, DA150, DA165, F35, F36	Own	6	S426	V427	G102 G103	G102 G103 ♂ 1/32" O. S.
18	DODGE TRUCK	1929-32	GE, HE, RE, OE, TE, 2T 150, 3 Ton 135, 165, 185, JE, YE	Own 1/8" O. S. Head for S388	6	S388 S554	V389	G101	G101
19	DODGE TRUCK	1929	ED, OD, TD, JD, YD after Eng. No. 7000	Own	6	S388	V389	G101	G101
20	DODGE TRUCK	1928-29	ED, OD, TD, JD, YD to Eng. No. 7000	Own	6	S388	V389	G101	G101
21	DODGE TRUCK	1923-27	ABC Series, BD, DDT, ID, LD, MD, SD	Own 1/8" O. S. Head for S29	4	*S29 S364	*V29	G100	G100
22	DOVER TRUCK	1929-30	3/4 Ton	Essex 1/8" O. S. Head for S302	6	*S302 S441	*V302	G115	G115
23	DURANT	1930-32	6-12, 6-14, 6-19, 6-21, 6-22	Cont. 22A	6	S546	V392	G229	G229
24	DURANT	1928-31	6-17, 70, 75	Cont. 15U	6	S343	V344	G225	G225
25	DURANT	1928-29	60, 63, 65, 66	Cont. 15L	6	S357	V358	G184	G184
26	DURANT	1928	55	Cont. 14L	6	S357	V358	G184	G184
27	DURANT	1926-28	M2, M4, 40	Cont. W5	4	S44	V44	G225	G225

*Indicates 1/32" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS125	VS304	R101		†L529		3 1/8	3 11/16	2	Fac. Dup.	P755	.859	2 5/8	F	PB671	6
					L506		3 1/8	3 11/16	2	3-1/8, 1-5/32	P755	.859	2 5/8	F	PB671	6
2	IS125	VS304	R101	†L524 Cam Ground Type			3 1/8	3 11/16	2	3-1/8, 1-5/32	P755	.859	2 5/8	F	PB671	6
				L583 Same as L524 except relieved for round grinding.												
				L543 Cam Ground Type			3 1/8	3 11/16	2	2-1/8, 2-5/32	P755	.859	2 5/8	F	PB671	6
				L588 Same as L543 except relieved for round grinding.												
3	IS106				†L498		3 1/2	4 1/8	2 1/16	Fac. Dup.	P733	.8595	2 31/32	F	PB667	16
4	IS114	VS303	R100	†L121			3 5/8	4 1/8	2	3-1/8, 1-5/32	P121	.749	3	O		
						C465	3 5/8	4 1/8	2	3-1/8	P121	.749	3	O		
5	IS125	VS304	R101		†L529		3 1/8	3 11/16	2	Fac. Dup.	P755	.859	2 5/8	F	PB671	6
					L506		3 1/8	3 11/16	2	3-1/8, 1-5/32	P755	.859	2 5/8	F	PB671	6
6	IS125	VS304	R101		†L505		3 1/8	3 11/16	2	Fac. Dup.	P755	.859	2 5/8	F	PB671	6
					L506		3 1/8	3 11/16	2	3-1/8, 1-5/32	P755	.859	2 5/8	F	PB671	6
7	IS125	VS294	R101		†L537		3 1/4	3 11/16	2	Fac. Dup.	P731	.859	2 17/32	F	PB671	6
					L508		3 1/4	3 11/16	2	3-1/8, 1-5/32	P731	.859	2 17/32	F	PB671	6
8	IS125	VS294	R101		†L507		3 1/4	3 11/16	2	Fac. Dup.	P731	.859	2 17/32	F	PB671	6
					L508		3 1/4	3 11/16	2	3-1/8, 1-5/32	P731	.859	2 17/32	F	PB671	6
9	IS125	VS294	R66		†L507		3 1/4	3 11/16	2	Fac. Dup.	P731	.859	2 17/32	F	PB671	6
					L508		3 1/4	3 11/16	2	3-1/8, 1-5/32	P731	.859	2 17/32	F	PB671	6
10	IS114	VS303	R100	†L121			3 5/8	4 1/8	2	3-1/8, 1-5/32	P121	.749	3	O		
						C465	3 5/8	4 1/8	2	3-1/8	P121	.749	3	O		
11	IS132	VS160	R13		†L445		3 5/8	4 9/16	2 9/16	Fac. Dup.	P668	1.000	3 1/4	O		
					L535		3 5/8	4 9/16	2 9/16	4-1/8, 1-5/32	P668	1.000	3 1/4	O		
12	IS132	VS160	R13		†L445		3 5/8	4 9/16	2 9/16	Fac. Dup.	P668	1.000	3 1/4	O		
					L535		3 5/8	4 9/16	2 9/16	4-1/8, 1-5/32	P668	1.000	3 1/4	O		
13	IS125	VS294	R10		†L434		3 1/8	3 11/16	2	Fac. Dup.	P232	.812	2 23/32	O		
				L232	L366	C508(B)	3 1/8	3 11/16	2	3-1/8	P232	.812	2 23/32	O		
14	IS107	VS185	R12	†L121			3 5/8	4 1/8	2	3-1/8, 1-5/32	P121	.749	3	O		
						C465	3 5/8	4 1/8	2	3-1/8	P121	.749	3	O		
15	IS107	VS185	R12	†L121			3 5/8	4 1/8	2	3-1/8, 1-5/32	P121	.749	3	O		
						C465	3 5/8	4 1/8	2	3-1/8	P121	.749	3	O		
16	IS107	VS185	R12	†L121			3 5/8	4 1/8	2	3-1/8, 1-5/32	P121	.749	3	O		
						C465	3 5/8	4 1/8	2	3-1/8	P121	.749	3	O		
17		VS181	R13		†L389	C596	3 5/8	3 11/16	2 1/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
18		VS160	R13		†L389	C596	3 5/8	3 11/16	2 1/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
19		VS160	R13		†L389	C596	3 5/8	3 11/16	2 1/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
20		VS160	R13		†L372		3 1/4	3 11/16	2 1/16	3-1/8, 1-5/32	P578	.859	2 3/4	F	PB600	6
21	IS112	VS34	R12	†L25			3 7/8	4 3/8	2 7/16	4-1/8	P025	.8125	3 5/8	S	PB504	4
					†L370		3 7/8	4 3/8	2 7/16	3-1/8, 1-5/32	P025	.8125	3 5/8	S	PB504	4
						C34	3 7/8	4 3/8	2 7/16	3-1/16	P025	.8125	3 5/8	S	PB504	4
22	IS102	VS167	R16	L443	†L444		2 3/4	3 1/16	1 11/16	3-1/8	P123	.750	2 31/32	F	PB505	6
23	IS147	VS160	R12		L372		3 1/4	3 11/16	2 1/16	3-1/8, 1-5/32	P578	.859	2 3/4	F	PB600	6
24	IS165	VS231	R12		†L389	C596	3 5/8	3 11/16	2 1/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
25	IS100	VS162	R12		†L402		2 7/8	3 7/16	2	3-1/8, 1-5/32	P701	.734	2 13/16	F	PB552	6
26	IS100	VS162	R12	L387	†L367		2 3/4	3 5/8	1 11/16	2-1/8, 1-1/16	P319	.734	2 5/8	F	PB552	6
						C457	2 3/4	3 5/8	1 11/16	3-1/16	P279	.734	2 1/16	S	PB552	6
27	IS165	VS63	R12	L381	†L368	C442	3 5/8	4	1 11/16	2-1/8, 1-1/16	P209	.859	2 31/32	F	PB546	4

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

(6-1-38)

Du-Fa Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	DURANT	1922-26	A22	Own	4	S30	V30	G186	G187
2	ELCAR	1930	130, 140	Cont. 12K	8	S447	V448	G265	G265
3	ELCAR	1928-30	6-70, 75, 75A	Lyc. WS	6	S379	V380	G168	G168
4	ELCAR	1928-29	8-91, 8-92, 120	Lyc. MD	8	S318 卐AS855	V319	G168	G168
5	ELCAR	1928-29	8-82, 95, 96	Lyc. GS	8	S379	V380	G168	G168
6	ELCAR	1927-28	8-81, 8-90	Lyc. 4H	8	S318 卐AS855	V319	G168	G168
7	ELCAR	1927-28	8-78, 8-82	Lyc. GT	8	S379	V380	G168	G168
8	ERSKINE	1930	53, Dynamic Six	Own	6	S439	V440	G173	G173
9	ERSKINE	1928-29	All	Cont. 9F	6	S508	V385	G309	G309
10	ERSKINE	1927	All	Cont. 8F	6	S384	V385	G309	G309
11	ESSEX	1934	Terraplane, KU	Own	6	S825	V826	G115	G115
12	ESSEX	1933	Terraplane 8	Own 8 ⅛" O. S. Head for S302		*S302 S441	V518	G115	G115
13	ESSEX	1932-33	Pathfinder, Terraplane, K	Own	6	*S555	*V569	G115	G115
14	ESSEX	1931	Super Six	Own 6 ⅛" O. S. Head for S302		*S302 S441	*V302	G115	G115
15	ESSEX	1930	Challenger	Own 6 ⅛" O. S. Head for S302		*S302 S441	*V302	G115	G115
16	ESSEX	1929	Challenger	Own 6 ⅛" O. S. Head for S302		*S302 S441	*V302	G115	G115
17	ESSEX	1925-28	Super Six	Own 6 ⅛" O. S. Head for S302		*S302 S441	*V302	G115	G115
18	ESSEX	1923-24	Six	Own	6	S62	V62	G115	G115
19	ESSEX	1922-23	Four	Own 4 Push Rod Guide Up. Push Rod Guide Lr.		S33	V31	G185 G278 G279	G188 G278 G279
20	ESSEX	1918-22	Four	Own 4 Push Rod Guide Up. Push Rod Guide Lr.		S33	V31	G185 G278 G279	G188 G278 G279
21	FAGEOL TRUCK	1935-38	300HP, 300RA, 326HP, 3-8T	Wauk. 6-110	6	卐AS771	V789		
22	FAGEOL TRUCK	1935-38	106BK, 135BK, 250BK, 226BK, 1½-6T	Wauk. BK	6	S780 卐AS914	V781	G421	G421
23	FAGEOL TRUCK	1933-38	300HP, 370HP, 370RA, 370C, 470HP, 846HP, 846AL, 3-8T; 225C Bus	Wauk. 6-125	6	AS740	V969		
24	FAGEOL TRUCK	1933-38	250, 250MK, 250RA, 300, 2½-4T	Wauk. MK	6	S712	V612	G413	G413
25	FAGEOL TRUCK	1933-38	685RB, 1046RB, 1046AL, 3-10T	Wauk. RB	6	S126 卐AS730 S711 S660	V126	G210	G209
				S126 with ½" Stem ⅛" O. S. Head for S126					
26	FAGEOL TRUCK	1933-36	370SR, 5, 6T	Wauk. SRK	6	S722 卐AS752	V723	G330	G331
27	FAGEOL TRUCK	1930-32	370, 470, 6-66, 3, 4, 6T	Wauk. SRL	6	S676 卐AS754	V677	G330	G331
28	FAGEOL TRUCK	1929-32	100, 1¼T	Wauk. XA	4	S290	V290	G368	G369
29	FAGEOL TRUCK	1929-31	130, 1½, 2T	Wauk. V	4	S611	V611	G326	G327
30	FAGEOL TRUCK	1928-31	445, 645, 685, 4, 6T	Wauk. AB	4	S126 卐AS730 S711 S660	V126	G210	G209
				S126 with ½" Stem ⅛" O. S. Head for S126					

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1			R21			C122(B)	3 7/8	3 5/8	1 7/8	2-1/4	P155	.850	3 11/16	O		
				†L5			3 7/8	4 1/8	1 7/8	3-1/8	P155	.850	3 11/16	O		
2	IS105		R13		†L389	C596	3 5/8	3 11/16	2 1/16	3-1/8, 1-3/32	P594	.859	2 7/8	F	PB600	8
3	IS102	VS83	R2			C578(B)	2 7/8	3 1/2	1 13/16	4-1/8	P612	.875	2 5/8	O		
					†L396		2 7/8	3 1/2	1 13/16	2-1/8, 1-1/4	P612	.875	2 5/8	O		
4	IS103	VS33	R1		†L397		3 1/4	3 11/16	2 7/16	2-1/8, 2-1/4	P613	.875	2 11/16	O		
						C739(B)	3 1/4	4	2 7/16	3-1/8, 1-7/8	P613	.875	2 11/16	O	PB527	16
5	IS102	VS33	R2			C578(B)	2 7/8	3 1/2	1 13/16	4-1/8	P612	.875	2 5/8	O		
					†L396		2 7/8	3 1/2	1 13/16	2-1/8, 1-1/4	P612	.875	2 5/8	O		
6	IS103	VS33	R1	L361			3 1/4	3 3/4	1 13/16	2-1/8, 1-1/4	P273	.875	2 11/16	O		
7	IS102	VS83	R2		†L417		2 3/4	3 3/8	1 13/16	2-1/8, 1-3/16	P359	.875	2 1/4	O		
						C575	2 3/4	3 1/2	1 7/8	4-1/8	P359	.875	2 1/4	O		
8	IS103	VS165	R63			†C703(B)	3 1/4	3 7/8	2 11/16	3-1/8, 1-3/16	P702	.875	2 7/8	O	PB655	12
9	IS150	VS90	R14			†C590	2 3/4	3	1 3/4	3-1/8, 1-1/8	P590	.734	2 5/16	F	PB552	6
10	IS150	VS90	R14			†C515	2 5/8	3	1 3/4	3-1/8, 1-3/16	P377	.734	2 5/16	F	PB552	6
				L376			2 5/8	3 1/8	1 3/4	4-1/8	P377	.734	2 5/16	F	PB552	6
11	IS101	VS335	R16	†L517 ☜ Cam Ground Type 3 3 3/16 1 11/16 2-3/16, 1-1/8, 1-1/4							P724	.750	2 1/16	F	PB505	6
				L582 Same as L517 except relieved for round grinding.												
12	IS102	VS313	R16	†L516 ☜ Cam Ground Type 2 11/16 3 1/16 1 11/16 2-3/16, 1-3/16, 1-1/4							P724	.750	2 1/16	F	PB505	8
				L581 Same as L516 except relieved for round grinding.												
13	IS102	VS290	R16	†L516 ☜ Cam Ground Type 2 11/16 3 1/16 1 11/16 2-3/16, 1-3/16, 1-1/4							P724	.750	2 1/16	F	PB505	6
				L581 Same as L516 except relieved for round grinding.												
14	IS102	VS290	R102	†L484 ☜ Cam Ground Type 2 7/8 3 1/16 1 11/16 2-3/16, 1-3/16, 1-1/4							P708	.750	2 5/16	F	PB505	6
				L580 Same as L484 except relieved for round grinding.												
15	IS102	VS167	R16	†L473			2 3/4	3 1/16	1 11/16	4-1/8	P123	.750	2 3/16	F	PB505	6
16	IS102	VS167	R16	†L443	†L444		2 3/4	3 1/16	1 11/16	3-1/8	P123	.750	2 3/16	F	PB505	6
17	IS102	VS131	R16	†L123	L374	C373	2 11/16	3 1/16	1 11/16	3-1/8	P123	.750	2 3/16	F	PB505	6
18		VS131	R16	†L124			2 5/8	3	1 5/8	3-1/8	P124	.750	2	F	PB505	6
19		VS71 ♂Exh. VS75 ♂Int.	R17 ♂Exh. R15 ♂Int.	†L9			3 5/8	3 13/16	1 13/16	3-1/8	P039	.875	2 13/16	F		
20		VS71 ♂Exh. VS75 ♂Int.	R17 ♂Exh. R15 ♂Int.	†L39			3 5/8	3 13/16	1 13/16	3-1/8	P039	.875	2 13/16	F		
21	IS132			†L568 ☜ Aerotype			4	4 1/2	2 11/16	3-1/8, 1-3/16	P876	1.000	3 11/16	AP	PB729	6
22	IS145	VS414	R149	†L605 ☜ Aerotype			3 3/4	4 5/8	2 11/16	3-1/8, 1-1/4	P939	1.000	3 11/16	F	PB729	6
23	IS132			†L620 ☜ Aerotype			4 5/8	5 1/16	2 11/16	3-1/8, 1-1/4	P947	1.375	4 1/4	AP	PB730	6
24	IS136	VS359	R28			C808(B)	4 1/8	4 5/8	2 11/16	3-1/4	P677	1.000	3 5/8	O		
				†L570 ☜ Aerotype			4 1/8	4 1/2	2 11/16	3-1/8, 1-3/16	P878	1.000	3 11/16	AP	PB729	6
25	IS121					†C814(B)	5	5 5/8	3 1/16	4-1/4	P814	1.375	4 1/16	O		
26	IS106	VS373	R28	†L569 ☜ Aerotype			4 5/8	5 1/4	2 7/8	3-1/16, 1-1/4	P877	1.375	4 11/16	AP		
27	IS106	VS373	R28			†C782(B)	4 3/8	4 5/8	2 11/16	3-1/8, 1-3/16	P760	1.000	3 7/8	O		
28	IS104	VS343	R28			†C640(B)	3 1/2	3 11/16	2 1/16	3-1/4	P719	.740	3 1/16	O		
29	IS130		R28			†C677(B)	4	4 1/16	2 11/16	3-1/4	P677	1.000	3 5/8	O		
30	IS121					†C723	4 1/2	5	2 13/16	3-1/8, 1-1/4	P723	1.375	3 7/8	O		

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	FAGEOL TRUCK	1928-30	135, 2T	Wauk. XL	6	S612	V612	G413	G413
2	FAGEOL TRUCK	1928-30	340, 365, 370, 3T	Wauk. KS	6	S620	V620	G326	G327
3	FAGEOL TRUCK	1925-30	235, 340, 2, 3T	Wauk. FU	4	S131	V131	G210	G209
4	FAGEOL BUS	1922-29	B, C	Own	4-6	S152	V152	G161	G162
				¼" O.S. Head for S-V152		S606	V606		
				¼" O.S. Head for S606		S217			
5	FALCON KNIGHT	1928	M12						
6	FALCON KNIGHT	1927	M10						
7	FARGO TRUCK	1929-30	Clipper, ¾T	Own	6	S366	V459	G108	G109
8	FARGO TRUCK	1929-30	Freighter, 1T	Own	6	*S443	*V443	G104	G105
9	FARGO TRUCK	1929-30	Packet Four, ½T	Own	4	S72	V424	G106	G107
10	FARMALL TRAC.	1934-38	F12 after Mtr. FS3035	Own	4	S798	V798	G418	G418
11	FARMALL TRAC.	1931-38	F30, 20-30	Own	4	S795	V796	G419	G419
12	FARMALL TRAC.	1924-38	20, F20	Own	4	S171	V171	G214	G214
						♂Narrow Groove			
				Wide Groove		S258	V258		
				Double Groove		S799	V799		
13	FEDERAL TRUCK	1936-38	10, 1½T	Herc. OOB	4	S735	V736	G386	G386
						♂Drilled Stem			
				Slotted Stem		S701	V702		
						卐AS772			
14	FEDERAL TRUCK	1935-38	50, 50H, 5-6T	Wauk. MZ	6	S712	V612	G413	G413
15	FEDERAL TRUCK	1935-38	29, 29H, 89, 3-4½T	Herc. JXD	6	S701	V702	G386	G386
						卐AS772			
16	FEDERAL TRUCK	1935-38	C7, C7W, C8, C8W, X8RDR, X8R, C8H, 6-7½T	Wauk. SRK	6	S722	V723	G330	G331
						卐AS752			
17	FEDERAL TRUCK	1934-38	15, 15X, 18X, 75, 75H, 15H, 1½, 2T	Herc. JXA	6	S701	V702	G386	G386
						卐AS772			
18	FEDERAL TRUCK	1934-38	18, 18H, 20, 20H, 21, 22, 80, 80H, 2-3½T	Herc. JXB	6	S701	V702	G386	G386
						卐AS772			
19	FEDERAL TRUCK	1934-38	25, 28, 25H, 85, 85H, 2½-4½T	Herc. JXC	6	S701	V702	G386	G386
						卐AS772			
20	FEDERAL TRUCK	1934-38	36, 37, A8, 40, 40DR, 3½, 4T	Wauk. MK	6	S712	V612	G413	G413
21	FEDERAL TRUCK	1933-36	A7, 30, 2½, 3T	Wauk. MS	6	S712	V612	G413	G413
22	FEDERAL TRUCK	1932-36	DM, D4, D2SWL, D2DL	Cont. W10	4	S586	V587		
23	FEDERAL TRUCK	1932-34	E3, E4, G5, G5L, 1½, 2T	Cont. 25A	6	S546	V392	G229	G229
24	FEDERAL TRUCK	1930-36	X8, X8DR, 7½T	Cont. B7	4	S129	V129	G193	G193
25	FEDERAL TRUCK	1932-34	A600T, A600TDR, A600TW, A600D, A600SW, 4½-5T	Cont. E601	6	S775	V776		
26	FEDERAL TRUCK	1932-33	600, A600, A600T, A600TDR, A600TW, A600SW, A600D, U6, 2½-5T	Cont. E600	6	S775	V776		
27	FEDERAL TRUCK	1930-34	C7, C7W, C8, C8W, X8R	Cont. 21R	6	S639	V639		
						♂⅝" Stem 45° Seat			
				Single Groove 1/16" Stem 45° Seat		S673	V674	G313	G314
				Single Groove 1/16" Stem 60° Seat		S1015	V776	♂1/16" I. D.	
				Double Groove 1/16" Stem 60° Seat		S1016	V1018		
				Aerotype for S1016		卐AS1017			

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS							PISTON PINS				PIN BUSHINGS	
				STOCK NO.			SPECIFICATIONS									
				Alloy	Strut	Iron	Diam.	Lgth.	Comp.	Rings Used	Stock No.	Diam.	Lgth.	Type	Stock No.	No. Used
1	IS111		R28			†C640(B)	3 1/2	3 11/16	2 1/16	3-1/8	P719	.740	3 1/16	O		
2	IS130	VS373	R28			†C677(B)	4	4 11/32	2 15/32	3-3/16	P677	1.000	3 5/8	O		
3	IS140					†C453(B)	4	5 11/32	3 3/32	3-1/4	P571	1.250	3 1/16	O		
4				†L304 Aerotype ♂ Concave Head EP8—Aluminum pin retainer.			4 1/4	4 1/16	2 1/16	5-1/8, 1-3/16	P304	1.250	3 23/32	F	PB611	4-6
5					†L407		2 11/16	3 5/8	2	4-1/8	P618	.797	2 3/4	S		
6				L272		†C581	2 11/16	3 5/8	2	3-1/8	P272	.734	2 13/32	O		
7		VS156	R10		†L434		3 1/2	3 11/16	2	Fac. Dup.	P232	.812	2 25/32	O		
				L232	L366	C508(B)	3 1/2	3 11/16	2	3-1/8	P232	.812	2 25/32	O		
8	IS125	VS156	R10		†L388		3	3 11/16	2	Fac. Dup.	P120	.749	2 11/16	O		
				L120	L365	C391(B)	3	3 11/16	2	3-1/8	P120	.749	2 11/16	O		
9	IS107	VS185	R12	†L121			3 5/8	4 1/8	2	3-1/8, 1-5/32	P121	.749	3	O		
						C465	3 5/8	4 1/8	2	3-1/8	P121	.749	3	O		
10	IS158	VS375	R101			†C899	3	3 31/64	1 53/64	2-1/8, 2-3/16	P899	.919	2 1/2	F	PB731	4
				Sleeve Assembly SA27												
						†C904	3	3 7/16	1 11/16	4-1/8, 1-3/16	P899	.919	2 1/2	F	PB731	4
				Sleeve Assembly SA28												
						C962	3	3 13/32	1 27/32	4-1/8, 1-3/16	P899	.919	2 1/2	F	PB731	4
						♂ For 5000 ft. Altitude										
				Sleeve Assembly for 5000 ft. Altitude SA39												
11		VS426	R150			†C892	4 1/4	5 3/4	2 11/16	4-1/8	P349	1.299	3 11/16	S	PB541	4
				Sleeve Assembly SA17												
						C959	4 1/4	6 11/32	3 7/32	4-1/4	P349	1.299	3 11/16	S	PB541	4
						♂ For 5000 ft. Altitude										
				Sleeve Assembly for 5000 ft. Altitude SA36												
12		VS362				†C729	3 3/4	4 1/2	2 1/16	4-1/8	P729	1.299	3 3/8	S	PB542	4
				Sleeve Assembly SA16												
			R29 R149			C960	3 3/4	4 23/32	2 13/32	4-1/4	P729	1.299	3 3/8	S	PB542	4
				♂ For 5000 ft. Altitude												
				Sleeve Assembly for 5000 ft. Altitude SA37												
13	IS131	VS353				†C813(B)	3 3/4	4 3/16	2 1/16	3-1/8, 1-1/8	P813	1.000	3 3/8	O		
				L563 Aerotype			3 3/4	4 1/8	2 1/16	3-1/8, 1-3/16	P813	1.000	3 3/8	O		
			R126													
14	IS136	VS359	R28			C905(B)	4 1/4	4 5/8	2 11/32	3-1/8, 1-3/16	P677	1.000	3 5/8	O		
15	IS131	VS353	R126	†L603 Aerotype			4	4 1/16	2 1/16	3-1/8, 1-3/16	P937	1.000	3 1/2	O		
16	IS106	VS373	R28	†L569 Aerotype			4 5/8	5 1/4	2 7/8	3-5/32, 1-3/16	P877	1.375	4 23/64	F	PB730	6
17	IS131	VS353	R126	L561 ♂ Aerotype		†C812(B)	3 3/8	4 3/8	2 1/16	3-1/8, 1-1/8	P812	1.000	2 13/16	O		
18	IS131	VS353	R126	†L562 Aerotype			3 5/8	4 3/8	2 1/16	3-1/8, 1-1/8	P845	1.000	3 3/16	O		
						C845(B)	3 5/8	4 3/8	2 1/16	3-1/8, 1-1/8	P845	1.000	3 5/32	O		
19	IS131	VS353	R126	†L563 Aerotype			3 3/4	4 1/8	2 1/8	3-1/8, 1-1/8	P813	1.000	3 3/8	O		
						C813(B)	3 3/4	4 1/8	2 1/8	3-1/8, 1-1/8	P813	1.000	3 3/8	O		
20	IS136	VS359	R28			†C808	4 1/8	4 3/8	2 11/32	3-3/16	P677	1.000	3 5/8	O		
				†L570 Aerotype			4 1/8	4 1/2	2 11/32	3-1/8, 1-1/8	P878	1.000	3 23/32	AP	PB729	6
21	IS136	VS359	R28													
22	IS109	VS160	R12	L523 Aerotype			3 7/8	4 1/16	2 1/16	3-1/8, 1-3/16	P796	1.000	3 3/8	F	PB685	4
23	IS103		R12		L389	†C596	3 3/8	3 15/16	2 1/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
24	IS156	VS70	R90			†C418	5	5 7/8	3 3/32	4-1/4	P288	1.500	4 1/16	S	PB578	4
25	IS132	VS221				†C981	3 7/8	5 1/16	3 1/16	3-1/8, 1-1/4	P980	1.250	3 5/64	F		
26	IS132	VS221				†C980	3 11/16	5 1/16	3 1/16	3-1/8, 1-1/4	P980	1.250	3 5/64	F		
27	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C776	4 3/8	4 13/16	2 3/4	3-3/16, 1-1/4	P776	1.250	3 21/32	F	PB617	6
			R159			†C823	4 3/8	5 1/16	2 3/4	1-3/16, 2-5/32, 1-1/4	P776	1.250	3 21/32	F	PB617	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES Exhaust	VALVES Intake	VALVE GUIDES Exh.	VALVE GUIDES Int.
1	FEDERAL TRUCK	1930-34	4C6A, 4CAB, U6, U6DR, U6SW	Cont. 20R	6	S639	V639		
						♂⅝" Stem 45° Seat			
			Single Groove 1/16" Stem 45° Seat			S673	V674	G313	G314
			Single Groove 1/16" Stem 60° Seat			S1015	V776	♂1/16" I. D.	
			Double Groove 1/16" Stem 60° Seat			S1016	V1018		
			Aerotype for S1016			卐AS1017			
2	FEDERAL TRUCK	1929-36	U5R, 406, U6, T10B, T10DR, T10W	Cont. 18R	6	S639	V639		
						♂⅝" Stem 45° Seat		G313	G314
			Single Groove 1/16" Stem 45° Seat			S673	V674	♂1/16" I. D.	
			Single Groove 1/16" Stem 60° Seat			S1015	V776		
			Double Groove 1/16" Stem 60° Seat			S1016	V1018		
			Aerotype for S1016			卐AS1017			
3	FEDERAL TRUCK	1928-34	T20, T2B, T3W, T3WFA, 2T	Wauk. V	4	S611	V611	G326	G327
4	FEDERAL TRUCK	1932-33	E2SWL, E2DL, 3T	Cont. 17E	6	S391	V392	G229	G229
5	FEDERAL TRUCK	1930-32	T10B, T10W, 2½, 3T	Cont. 16R	6	S639	V639		
						♂⅝" Stem			
				45° Seat		S673	V674	G313	G314
						♂1/16" Stem		♂1/16" I. D.	
6	FEDERAL TRUCK	1928-32	A6, F7, A6T, T8WF, F8	Cont. 16C	6	S641	V344	G225	G225
7	FEDERAL TRUCK	1929	F6, 1T	Cont. 34L	6	S357	V358	G184	G184
8	FEDERAL TRUCK	1929	UL7, 3½T	Cont. L4	4	S101	V101	G193	G193
						♂Grooved Stem			
				Taper Grooved Stem		S608	V608		
9	FEDERAL TRUCK	1926-29	Scout, FW, 1T	Wauk. XA	4	S290	V290	G368	G369
10	FEDERAL TRUCK	1923-29	U2, U5, 2½T	Cont. K4	4	S107	V107	G193	G193
11	FEDERAL TRUCK	1921-29	X8, 5, 5½T	Cont. B5	4	S129	V129	G193	G193
12	FEDERAL TRUCK	1928	T2W, T6W, 26B, 2T	Cont. 12C	6	S641	V344	G225	G225
13	FEDERAL TRUCK	1925-28	FK, S25, 26, 27, 1, 2T	Knight	4				
14	FEDERAL TRUCK	1926-27	UB6, 2B6, 3T	Cont. 6B	6	S287	V287	G189	G189
						♂Grooved Stem			
				Taper Grooved Stem		S288	V288		
15	FISHER TRUCK	1932	85A, 100A, 105A, 4, 5T	Cont. 21R	6	S673	V674	G313	G314
16	FISHER TRUCK	1932	61A, 80A, 2½, 3½, 4T	Cont. 16R	6	S639	V639		
						♂⅝" Stem			
				45° Seat		S673	V674	G313	G314
						♂1/16" Stem		♂1/16" I. D.	
17	FISHER TRUCK	1932	15A, 10AX, 1½T	Cont. 17E	6	S391	V392	G229	G229
18	FISHER TRUCK	1930-32	16A, 20A, 25A, 1½, 2½T	Cont. 16C	6	S641	V344	G225	G225
19	FISHER TRUCK	1928-29	Jr, Exp. 1T	Cont. 31L	6	S357	V358	G184	G184
20	FISHER TRUCK	1926-29	Fast Freight, 1½T	Cont. S4	4	S263	V263		
21	FISHER TRUCK	1927	Heavy Duty, 2½T	Cont. 6B	6	S287	V287	G189	G189
						♂Grooved Stem			
				Taper Grooved Stem		S288	V288		
22	FISHER TRUCK	1927	Jr. Exp. 1T	Cont. 20L	6	S357	V358	G184	G184
23	FLINT	1926-27	60	Cont. 14U	6	S343	V344	G225	G225
24	FLINT	1926-27	Jr. 6, 18Z	Cont. 9L	6	S357	V358	G184	G184
25	FLINT	1924-25	6-40, Light Six	Cont. 7U	6	S44	V44	G184	G184
26	FLINT	1924-27	E, 55, 80	Own	6	S86	V86	G196	G196

*Indicates 1/32" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-33)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13 R159			†C714	4 1/8	4 1/16	2 7/8	3-3/16, 1-1/4	P709	1.250	3 1/16	F	PB617	6
						†C822	4 1/8	5 3/16	2 7/8	2-3/16, 1-5/16, 1-1/4	P709	1.250	3 1/16	F	PB617	6
2	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13 R159			†C709	4	4 1/16	2 1/16	3-3/16, 1-1/4	P709	1.250	3 1/16	F	PB617	6
						†C821	4	5 3/16	2 1/16	1-3/16, 2-5/16, 1-1/4	P709	1.250	3 1/16	F	PB617	6
3	IS130	VS295	R28			†C677(B)	4	4 1/16	2 1/16	3-3/16	P677	1.000	3 5/8	O		
4	IS135	VS231	R12		†L389	C596	3 5/8	3 1/16	2 1/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
5	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C709 †C821	4 4	4 1/16 5 3/16	2 1/16 2 1/16	3-3/16, 1-1/4 1-3/16, 2-5/16, 1-1/4	P709 P709	1.250 1.250	3 1/16 3 1/16	F F	PB617 PB617	6 6
6	IS165	VS231	R12		†L389	C596	3 5/8	3 1/16	2 1/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
7	IS100	VS251	R12			C472	2 7/8	3 5/32	1 31/32	2-1/8, 1-3/16	P701	.734	2 1/16	F	PB552	6
8	IS140	VS67	R90 R91			†C158	4 1/2	5 1/16	3 5/8	4-1/4	P149	1.375	4	S	PB580	4
9	IS104	VS295	R28			†C640(B)	3 1/2	3 1/16	2 1/16	3-3/16	P719	.740	3 3/16	O		
10	IS137	VS73	R90			†C218	4 1/8	5 3/16	3 5/8	4-1/4	P148	1.250	3 1/16	S	PB579	4
11	IS156	VS70	R90			†C271	4 3/4	6 1/8	3 1/2	4-1/4	P150	1.500	4 1/4	S	PB578	4
12	IS165	VS231	R12			†C479	3 1/4	3 3/4	2 1/16	3-3/16	P282	1.000	2 13/16	S	PB558	6
					L433		3 1/4	3 3/4	2 1/16	3-1/8, 1-5/32	P518	1.000	2 3/4	F	PB558	6
13				†L106(B)			3 5/8	4 3/4	2 3/8	3-1/8, 1-3/16	P0106	.9365	3 1/4	O		
14	IS143	VS92 ♂ Outer VS108 ♂ Inner	R34 R98			†C312	3 3/4	4 1/2	2 5/8	3-3/16	P085	1.125	3 3/16	S	PB532	6
15	IS130	VS221 In. ♂ VS283				†C776 †C828	4 1/8 4 1/8	4 1/16 5 3/16	2 3/4 2 3/4	3-3/16, 1-1/4 1-3/16, 2-5/16, 1-1/4	P776 P776	1.250 1.250	3 1/16 3 1/16	F F	PB617 PB617	6 6
16	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C709 †C821	4 4	4 1/16 5 3/16	2 1/16 2 1/16	3-3/16, 1-1/4 1-3/16, 2-5/16, 1-1/4	P709 P709	1.250 1.250	3 1/16 3 1/16	F F	PB617 PB617	6 6
17	IS135	VS231	R12		†L389	C596	3 5/8	3 1/16	2 1/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
18	IS165	VS231	R12		†L389	C596	3 5/8	3 1/16	2 1/16	3-1/8, 1-5/32	P594	.859	2 7/8	F	PB600	6
19	IS100	VS251	R12			C472	2 7/8	3 5/32	1 31/32	2-1/8, 1-3/16	P701	.734	2 1/16	F	PB552	6
20	IS137	VS198	R34			†C473	4 1/4	4 3/4	2 7/8	3-1/4	P277	1.500	3 13/16	F	PB574	4
21	IS143	VS92 ♂ Outer VS108 ♂ Inner	R34 R98			†C312	3 3/4	4 1/2	2 5/8	3-3/16	P085	1.125	3 3/16	S	PB532	6
22	IS100	VS251	R12	L387	†L367		2 3/4	3 5/8	1 13/16	2-1/8, 1-3/16	P319	.734	2 5/8	F	PB552	6
						C457	2 3/4	3 5/8	1 13/16	3-3/16	P279	.734	2 1/16	S	PB552	6
23	IS165	VS251	R12			†C479	3 1/4	3 3/4	2 1/16	3-3/16	P282	1.000	2 13/16	S	PB558	6
					L433		3 1/4	3 3/4	2 1/16	3-1/8, 1-5/32	P518	1.000	2 3/4	F	PB558	6
24	IS100	VS20	R12	L387	†L367		2 3/4	3 5/8	1 13/16	2-1/8, 1-3/16	P319	.734	2 5/8	F	PB552	6
						C457	2 3/4	3 5/8	1 13/16	3-3/16	P279	.734	2 1/16	S	PB552	6
25	IS165	VS20	R12			†C423	3 1/8	3 1/4	1 13/16	3-3/16	P278	.860	2 31/32	S	PB557	6
26		VS19	R34			†C245	3 5/8	4 1/16	2 1/16	3-3/16	P0119	.860	3	S	PB503	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Fo-Fo Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES Exhaust	VALVES Intake	VALVE GUIDES Exh.	VALVE GUIDES Int.
1	FORD	1937-38	78, 81A, Std. and De Luxe	Own 85	8	S950 卐AS899 S980 S950AEX S980AEX	V950 V950AIN 	G950S	G950S
			.015" Longer Stem for S950						
2	FORD	1937-38	74, 82A	Own 60	8	S975 S975AEX	V975 V975AIN	G975S	G975S
3	FORD	1934-36	V8, 48, 68	Own	8	S950 卐AS899 S980 S950AEX S980AEX	V950 V950AIN 	G950S	G950S
			.015" Longer Stem for S950						
4	FORD	1932-33	V8	Own	8	S850 卐AS898 S979 S850AEX S979AEX	V850 V850AIN 	G850S ♂ Split Guide	G850S
			.015" Longer Stem for S850						
			See footnote			S900	V900	G900 ♂ Solid Guide	G900
5	FORD	1928-32	A, B	Own	4	S800 卐AS897 S978 S800AEX S978AEX	S800 V750AIN 	G750S ♂ Split Guide	G750S
			.015" Longer Stem for S800						
			1/8" O.S. Head for S800			S801 S750	S801 V750		
			See Footnote			S700	V700	G700 ♂ Solid Guide	G700
6	FORD	1912-27	T	Own	4	S34 S341 S362 S370	V34 *V500 *V417 V341 		
			1/8" O. S. Head for V34						
			.198 O. S. Head for S-V34						
			Flat Seat						
			For Frontenac Head						
7	FORD BUS	1937-38	70, 81B, 818B, 811T	Own 85	8	S950 卐AS899 S980 S950AEX S980AEX	V950 V950AIN 	G950S	G950S
			.015" Longer Stem for S950						
8	FORD TRUCK	1937-38	77, 79, 81C, 81Y, 81U, 81T, 817T, 1/2-1 1/2T	Own 85	8	S950 卐AS899 S980 S950AEX S980AEX	V950 V950AIN 	G950S	G950S
			.015" Longer Stem for S950						
9	FORD TRUCK	1937-38	72, 75, 82C, 82Y, 1/2-1 1/2T	Own 60	8	S975 S975AEX	V975 V975AIN	G975S	G975S
10	FORD TRUCK	1934-36	67, 50, 51, 1/2-1 1/2T	Own	8	S950 卐AS899 S980 S950AEX S980AEX	V950 V950AIN 	G950S	G950S
			.015" Longer Stem for S950						
11	FORD TRUCK	1932-33	V8, 1/2-1 1/2T	Own	8	S850 卐AS898 S979 S850AEX S979AEX	V850 V850AIN 	G850S ♂ Split Guide	G850S
			.015" Longer Stem for S850						
			See Footnote			S900	V900	G900 ♂ Solid Guide	G900
12	FORD TRUCK	1928-33	A, AA, B, BB, 1/2-1 1/2T	Own	4	S800 卐AS897 S978 S800AEX S978AEX	S800 V750AIN 	G750S ♂ Split Guide	G750S
			.015" Longer Stem for S800						
			1/8" O.S. Head for S800			S801 S750	S801 V750		
			See Footnote			S700	V700	G700 ♂ Solid Guide	G700
13	FORD TRUCK	1912-27	T	Own	4	S34 S341 S362 S370	V34 *V500 *V417 V341 		
			1/8" O. S. Head for *V34						
			.198 O. S. Head for S-V34						
			Flat Seat						
			For Frontenac Head						
14	FORDSON TRAC.	1930-35	All	Own	4	S695	V695	G333	G333
15	FORDSON TRAC.	1928-29	All	Own	4	*S161 S202 S162	*V161 V202 V162	G264	G264
			1/16" O. S. Head for S-V161						
			1/16" O. S. Head for *S-*V161						

S700-V700 are conventional stem type Thompson Valve Assemblies for Ford Models A, AA, B, BB, including Spring Retainer and pin.
S900-V900 are conventional stem type Thompson Valve Assemblies for Ford V8, including Spring Retainer and Locks.

*Indicates 1/16" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS — STOCK NO. Alloy	Strut	Iron	PISTONS — SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS105	VS427	R118	†L652 Robotype			3 1/16	3 7/32	1 13/32	2-3/32, 1-5/32	P976	.750	2 11/32	F	PB703	8
				†L649			3 1/16	3 7/32	1 13/32	2-3/32, 1-5/32	P976	.750	2 11/32	F	PB703	8
				L700			3 1/16	3 7/32	1 23/32	2-3/32, 2-5/32	P778	.750	2.565	F	PB703	8
				♂Heavy Duty with Skirt Ring							P1000	.750	2 17/32	F		
											♂Fac. Dup. for Steel Piston					
2	IS150	VS404	R152	L651			2.6	2 21/32	1 13/32	2-3/32, 1-5/32	P955	.6877	2 11/32	F	PB754	8
											P977	.6877	2 11/32	F		
											Fac. Dup. for Steel Piston					
3	IS105	VS327	R118	†L550			3 1/16	2 23/32	1 17/32	2-3/32, 1-5/32	P777	.750	2 11/32	F	PB713	16
		VS427		L642 Aerotype			3 1/16	2 23/32	1 17/32	2-3/32, 1-5/32	♂Center Groove					
		♂Thicker Diam. Wire		L551 Four Rings			3 1/16	2 23/32	1 17/32	3-3/32, 1-5/32	P778	.750	2.565	F	PB703	8
											♂Plain					
				†L646 Robotype			3 1/16	2 23/32	1 17/32	2-3/32, 1-5/32	P976	.750	2 11/32	F	PB703	8
4	IS105	VS308	R117	†L550			3 1/16	2 23/32	1 17/32	2-3/32, 1-5/32	P777	.750	2 11/32	F	PB713	16
				L642 Aerotype			3 1/16	2 23/32	1 17/32	2-3/32, 1-5/32	♂Center Groove					
				L551 Four Rings			3 1/16	2 23/32	1 17/32	3-3/32, 1-5/32	P778	.750	2.565	F	PB703	8
											♂Plain					
				†L646 Robotype			3 1/16	2 23/32	1 17/32	2-3/32, 1-5/32	P976	.750	2 11/32	F	PB703	8
5	IS105	VS301	R19	L400			3 3/8	3 31/32	1 13/32	2-1/8, 1-5/32	P400	1.000	3 5/16	F	PB605	8
				♂.135" O.S. Semi-finished							♂Center Groove				♂.725 long	
				†L400A			3 3/8	3 31/32	1 13/32	2-1/8, 1-5/32	P675	1.000	3 3/16	F	PB641	8
				♂.075 O.S. Semi-finished							♂Plain				♂.747 long	
				L645 Robotype			3 3/8	3 31/32	1 13/32	2-1/8, 1-5/32						
				♂.135 O.S. Semi-finished											PB652	4
				L645A Robotype			3 3/8	3 31/32	1 13/32	2-1/8, 1-5/32					♂Use with Plain Pin	
				♂.075 O.S. Semi-finished												
				L515			3 3/8	4 7/32	1 13/32	3-1/8, 1-5/32						
						C862	3 3/8	3 31/32	1 13/32	2-1/8, 1-5/32						
6		VS127	R18			†C30 (B)	3 3/4	3 11/16	1 1/16	3-1/4	P023	.740	3 1/2	O	PB501	8
7	IS105	VS427	R118	†L652 Robotype			3 1/16	3 7/32	1 13/32	2-3/32, 1-5/32	P976	.750	2 11/32	F	PB703	8
				†L649			3 1/16	3 7/32	1 13/32	2-3/32, 1-5/32	P976	.750	2 11/32	F	PB703	8
				L700			3 1/16	3 7/32	1 23/32	2-3/32, 2-5/32	P778	.750	2.565	F	PB703	8
				♂Heavy Duty with Skirt Ring							P1000	.750	2 17/32	F		
											♂Fac. Dup. for Steel Piston					
8	IS105	VS427	R118	†L652 Robotype			3 1/16	3 7/32	1 13/32	2-3/32, 1-5/32	P976	.750	2 11/32	F	PB703	8
				†L649			3 1/16	3 7/32	1 13/32	2-3/32, 1-5/32	P976	.750	2 11/32	F	PB703	8
				L700			3 1/16	3 7/32	1 23/32	2-3/32, 2-5/32	P778	.750	2.565	F	PB703	8
				♂Heavy Duty with Skirt Ring							P1000	.750	2 17/32	F		
											♂Fac. Dup. for Steel Piston					
9	IS150	VS404	R152	L651			2.6	2 21/32	1 13/32	2-3/32, 1-5/32	P955	.6877	2 11/32	F	PB754	8
											P977	.6877	2 11/32	F		
											Fac. Dup. for Steel Piston					
10	IS105	VS327	R118	†L550			3 1/16	2 23/32	1 17/32	2-3/32, 1-5/32	P777	.750	2 11/32	F	PB713	16
		VS427		L642 Aerotype			3 1/16	2 23/32	1 17/32	2-3/32, 1-5/32	♂Center Groove					
		♂Thicker Diam. Wire		L551 Four Rings			3 1/16	2 23/32	1 17/32	3-3/32, 1-5/32	P778	.750	2.565	F	PB703	8
											♂Plain					
				†L646 Robotype			3 1/16	2 23/32	1 17/32	2-3/32, 1-5/32	P976	.750	2 11/32	F	PB703	8
11	IS105	VS308	R117	†L550			3 1/16	2 23/32	1 17/32	2-3/32, 1-5/32	P777	.750	2 11/32	F	PB713	16
				L642 Aerotype			3 1/16	2 23/32	1 17/32	2-3/32, 1-5/32	♂Center Groove					
				L551 Four Rings			3 1/16	2 23/32	1 17/32	3-3/32, 1-5/32	P778	.750	2.565	F	PB703	8
											♂Plain					
				†L646 Robotype			3 1/16	2 23/32	1 17/32	2-3/32, 1-5/32	P976	.750	2 11/32	F	PB703	8
12	IS105	VS301	R19	L400			3 3/8	3 31/32	1 13/32	2-1/8, 1-5/32	P400	1.000	3 5/16	F	PB605	8
				♂.135 O.S. Semi-finished							♂Center Groove				♂.725 long	
				†L400A			3 3/8	3 31/32	1 13/32	2-1/8, 1-5/32	P675	1.000	3 3/16	F	PB641	8
				♂.075 O.S. Semi-finished							♂Plain				♂.747 long	
				L645 Robotype			3 3/8	3 31/32	1 13/32	2-1/8, 1-5/32						
				♂.135 O.S. Semi-finished											PB652	4
				L645A Robotype			3 3/8	3 31/32	1 13/32	2-1/8, 1-5/32					♂Use with Plain Pin	
				♂.075 O.S. Semi-finished												
				L515			3 3/8	4 7/32	1 13/32	3-1/8, 1-5/32						
						C862	3 3/8	3 31/32	1 13/32	2-1/8, 1-5/32						
13		VS127	R18			†C30 (B)	3 3/4	3 11/16	1 1/16	3-1/4	P023	.740	3 1/2	O	PB501	8
14	IS110	VS220	R103			†C718	4 1/8	5 1/16	2 1/2	1-5/16, 2-5/32	P626	1.375	3 7/16	F		
						†C871	4 1/8	5 1/16	2 1/2	3-5/32, 1-7/32	P626	1.375	3 7/16	F		
15	IS110	VS220	R103			†C574(B)	4	5 1/16	2 1/2	1-5/16, 2-5/32	P626	1.375	3 7/16	F		

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Fo-Ga Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES Exhaust	VALVES Intake	VALVE GUIDES Exh.	VALVE GUIDES Int.
1	FORDSON TRAC.	1927	All	Own 1/16" O. S. Head for S-V161 1/16" O. S. Head for *S-*V161	4	*S161 S202 S162	*V161 V202 V162	G264	G264
2	FORDSON TRAC.	1917-26	All	Own 1/16" O. S. Head for S-V161 1/16" O. S. Head for *S-*V161	4	*S161 S202 S162	*V161 V202 V162	G160	G160
3	FRANKLIN	1932	Series 16	Own	6	S585	V517		
4	FRANKLIN	1930-31	145, 147, Series 15	Own	6	S516	V517	G300	G301
5	FRANKLIN	1929	135, 137	Own	6	S469	V470	G298	G299
6	FRANKLIN	1928	130	Own	6	S410	V411	G241	G157
7	FRANKLIN	1928	12B	Own	6	S410	V411	G241	G157
8	FRANKLIN	1927-28	12A, Airman	Own	6	S410	V411	G241	G157
9	FRANKLIN	1925-27	11, 11A, 11B	Own	6	S32	V32	G157	G157
10	FRANKLIN	1923-25	10A, 10B, 10C	Own	6	S32	V32	G157	G157
11	FRANKLIN	1916-22	9B	Own	6	S32	V32	G157	G157
12	F. W. D. TRUCK	1937-38	T32, 7½-10T	Wauk. 6-110	6	卐AS771	V789	G459	G460
13	F. W. D. TRUCK	1936-38	X6, 60T, 72T, MJ6, M6, T40, 6-30T	Wauk. 6-125	6	AS740	V969		
14	F. W. D. TRUCK	1935-38	HS, T26, 1½-7T	Wauk. BK	6	S780 卐AS914	V781	G421	G421
15	F. W. D. TRUCK	1935-38	M5, MF6, MJ5, YU, 5-7½T	Wauk. SRK	6	S722 卐AS752	V723	G330	G331
16	F. W. D. TRUCK	1933-38	HH6, LM, HM, 2½, 3T	Wauk. MK	6	S712	V612	G413	G413
17	F. W. D. TRUCK	1933-36	H6, 2, 2½T	Wauk. MS	6	S712	V612	G413	G413
18	F. W. D. TRUCK	1933-36	CU6, CU6A, LBU, 3½-6T	Wauk. SRS	6	S676 卐AS754	V677	G330	G331
19	F. W. D. TRUCK	1933-38	M7, MX6, T60, T65, 7½, 10, 15T	Wauk. RB S126 with ½" Stem ½" O. S. Head for S126	6	S126 卐AS730 S711 S660	V126	G210	G209
20	F. W. D. TRUCK	1931-38	SSU, SSUA, SUA, SU, CU6A, 3½-5T	Wauk. SRL	6	S676 卐AS754	V677	G330	G331
21	F. W. D. TRUCK	1927-36	H, H4, BTL, 1½, 2T	Wisc. SU Long Stem		S234 ♂ Short Stem S120	V234 V120	G328	G328
22	F. W. D. TRUCK	1932-33	M5, MF6, 5T	Wauk. AB S126 with ½" Stem ½" O. S. Head for S126		S126 卐AS730 S711 S660	V126	G210	G209
23	F. W. D. TRUCK	1929-30	H6, HH6, 2, 2½T	Wauk. XL		S612	V612	G413	G413
24	F. W. D. TRUCK	1927-29	1½T	Buda BTU		S111	V111	G198	G198
25	F. W. D. TRUCK	1919-26	B, 3T	Wisc. RBU		S133	V133		
26	GARDNER	1928-30	95, 130, 150	Lyc. MD	8	S318 卐AS855	V319	G168	G168
27	GARDNER	1930	140	Lyc. GR	8	S379	V380	G168	G168
28	GARDNER	1930	136	Lyc. WR	6	S379	V380	G168	G168
29	GARDNER	1926-29	75, 80, 120	Lyc. GT	8	S379	V380	G168	G168

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS110	VS220	R103			†C78	4	4 7/8	2 5/16	3-¼	P040	1.375	3½	O		
						C571(B)	4	4 7/8	2 5/16	3-¼	P040	1.375	3½	O	PB586	8
2	IS110	VS220	R103			†C78	4	4 7/8	2 5/16	3-¼	P040	1.375	3½	O		
						C571(B)	4	4 7/8	2 5/16	3-¼	P040	1.375	3½	O	PB586	8
3			R23													
4	Out. VS267 In. VS268		R23		†L496		3½	4 3/64	2 11/32	3-⅛, 1-3/16	P669	.9375	3⅛	O		
5	Out. VS51 In. VS201		R23		†L453		3½	4 1/16	2 11/32	4-⅛	P669	.9375	3⅛	O		
6	Out. VS51 In. VS201		R23	*Thompson Silcrome Valves will lick that tough job*												
7	Out. VS51 In. VS201		R23		†L476		3¼	3 23/32	2 5/16	4-⅛	P107	.875	2⅞	O		
8	Out. VS51 In. VS201		R23		†L405		3¼	3⅞	2¼	4-⅛	P107	.875	2⅞	O		
9		VS91			†L405		3¼	3⅞	2¼	4-⅛	P107	.875	2⅞	O		
10		VS91		†L118			3¼	3⅞	2 3/16	4-⅛	P107	.875	2⅞	O		
11		VS91		L117			3¼	4 3/32	2 11/32	4-⅛	P107	.875	2⅞	O		
						C17	3¼	4	2 3/8	3-3/16	P107	.875	2⅞	O		
12	IS132	VS415 ♂ Exhaust VS416 ♂ Inlet-Outer VS417 ♂ Inlet-Inner	R147	†L568 Aerotype			4	4½	2 11/32	3-⅛, 1-3/16	P876	1.000	3 15/32	AP	PB729	6
13	IS132			†L620 Aerotype			4⅝	5 3/32	2 31/32	3-⅛, 1-3/16	P947	1.375	4¼	AP	PB730	6
14	IS145	VS414	R149	†L605 Aerotype			3¾	4⅝	2 11/32	3-⅛, 1-3/16	P939	1.000	3 11/32	F	PB729	6
15	IS106	VS373	R28	†L569 Aerotype			4⅝	5¼	2⅞	3-5/32, 1-3/16	P877	1.375	4 23/32	AP	PB730	6
16	IS136	VS359	R28	†L570 Aerotype			4⅛	4½	2 11/32	3-⅛, 1-3/16	P878	1.000	3 23/32	AP	PB729	6
						C808(B)	4⅛	4⅝	2 3/32	3-3/16	P677	1.000	3⅝	O		
17	IS136	VS359	R28													
18	IS106	VS373	R28			†C860(B)	4⅛	4⅝	2 31/32	3-⅛, 1-3/16	P677	1.000	3⅝	O		
19	IS121					†C814(B)	5	5⅝	3 1/32	4-3/16	P814	1.375	4 7/16	O		
20	IS106	VS373	R28			†C782(B)	4⅝	4⅝	2 31/32	3-⅛, 1-3/16	P760	1.000	3⅞	O	PB529	12
				†L620 Aerotype			4⅝	5 1/32	2 31/32	3-⅛, 1-3/16	P947	1.375	4¼	AP	PB730	6
21	IS165	VS393				†C296	4	4¼	2⅛	3-3/16	P297	1.0625	3 7/16	WK	PB565	6
22	IS121					†C723	4½	5	2 27/32	3-⅛, 1-3/16	P723	1.375	3⅞	O		
23	IS132	VS359	R28			†C640(B)	3½	3 11/16	2 5/16	3-3/16	P719	.740	3 3/16	O		
24	IS163	VS247	R6			†C272	3¾	4½	2 1/16	4-3/16	P079	1.0625	3 7/32	S	PB564	4
25						†C292	5	5 23/32	2 23/32	3-¼	P587	1.375	4 7/16	S		
26	IS103	VS33	R1		†L397		3¼	3 1/8	2 7/16	2-⅛, 2-3/16	P613	.875	2 25/32	O		
						C739(B)	3¼	4	2 7/16	3-⅛, 1-3/16	P613	.875	2 25/32	O	PB527	16
27	IS102	VS83	R2		†L465		2⅞	3¾	2 5/16	3-⅛, 1-3/16	P612	.875	2⅝	O		
28	IS102	VS83	R2		†L465		2⅞	3¾	2 5/16	3-⅛, 1-3/16	P612	.875	2⅝	O		
29	IS102	VS83	R2		†L417		2¾	3⅝	1 15/16	2-⅛, 1-3/16	P359	.875	2¼	O		
						C575	2¾	3½	1 15/16	4-⅛	P359	.875	2¼	O		

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	GARDNER	1928-29	85, 125	Lyc. GS	8	S379	V380	G168	G168
2	GARDNER	1926-28	8B, 90	Lyc. 4SM	8	S318 卐AS855	V319	G168	G168
3	GARDNER	1925-27	6B	Lyc. 4SM	6	S318 卐AS855	V319	G168	G168
4	GARFORD TRUCK	1928-32	40, 1½, 2, 2½T	Buda DW6	6	S610	V610	G236	G236
5	GARFORD TRUCK	1932	S11, 1, 1½, 2T	Buda HS6	6	S640	V640	G240	G240
6	GARFORD TRUCK	1929-32	60, 80, 100, 100ZB, 2½, 3, 4T	Buda BA6	6	S661	V220	G253	G253
7	GARFORD TRUCK	1929-31	40	Buda DS6	6	S668	V669	G236	G236
8	GARFORD TRUCK	1928-30	60, 2½, 3T	Buda BUS	6	S205	V220	G253	G253
9	GARFORD TRUCK	1928-29	80, 100, 4, 5T	Buda BTU	4	S221	V221	G203	G203
10	GARFORD TRUCK	1925-28	30, 1½T	Buda KTU	4	S110	V110	G197	G197
11	GARFORD TRUCK	1923-28	50, 2½T	Buda EBU	4	S167	V167	G201	G201
12	GARFORD TRUCK	1919-28	MA70, 50, 2, 2½T	Buda HU	4	S108 ♂ Grooved Stem S167	V108 V167	G200	G200
				Taper Grooved Stem					
13	GARFORD BUS	1929-30	CB, 25-29 Pass.	Wisc. Z	6	S644	V644	G380	G380
14	GARFORD BUS	1924-29	KB, 17 Pass.	Wisc. Y	6	S255	V255	G328	G328
15	GLEANER BALDWIN	1928-29	12 Cut	Cont. W9	4	S717	V44	G184	G184
16	GLEANER BALDWIN	1928-29	10 Cut	Cont. H9	4	S717	V44	G184	G184
17	GLEANER BALDWIN		A, R, 10-12 Cut	Ford A	4	S800 卐AS897 S978 S800AEX S978AEX S801 S750 S700	S800 V750AIN S801 V750 V700	G750S ♂ Split Guide G700 ♂ Solid Guide	G750S ♂ Split Guide G700 ♂ Solid Guide
				.015" longer stem for S800					
				1/8" O.S. Head for S800					
18	GLEANER BALDWIN		9-10-12 Cut	Fordson	4	*S161 S202 S162	*V161 V202 V162	G264	G264
				1/16" O.S. Hd. for S-V161					
				1/16" O.S. Hd. for *S-*V161					
19	GLEANER BALDWIN	1928	9 Cut	Ford T	4	S34 S341 S362	V34 *V500 *V417 V341		
				1/8" O.S. Hd. for *V34					
				.198 O.S. Hd. for S-V34					
				Flat Seat					
20	G. M. C. TRUCK	1938	T14, T145, T15, T155	Pon. 223	6	S936	V937	G344	G345
21	G. M. C. TRUCK	1937	4403	Chev. 216	6	S942 卐AS956 S942AEX	V943 V943AIN	G452	G453
22	G. M. C. TRUCK	1936	4189, 4272	Chev. 207	6	S858 卐AS896 S858AEX	V859 V859AIN	G371	G392
23	G. M. C. TRUCK	1937-38	T14, T14A, T14B, T16, T16A, T16B, T16H, F16, F16B, F16C, F16H, FH16C, 4405, 4407, 4409	Olds. 230	6	S948	V861	G468	G468
24	G. M. C. TRUCK	1936	T14, T16, T16H, ½-1½T	Olds. 213	6	S878	V861	G387	G387
25	G. M. C. TRUCK	1935	T16, 1½-2T	Olds. 213	6	S860 卐AS910	V861	G387	G387
26	G. M. C. TRUCK	1934	T16, 1½-2T	Olds. 213	6	S817 卐AS905	V818	G387	G387

*Indicates 1/32" oversize stem valve also carried.
(6-1-38)

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS — STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS102	VS83	R2		†L396		2 7/8	3 1/2	1 1/16	2-1/8, 1-5/16	P612	.875	2 5/8	O		
						C578(B)	2 7/8	3 1/2	1 1/16	4-1/8	P612	.875	2 5/8	O		
2	IS103	VS83	R1			†C561	3 1/4	3 1/2	1 1/16	4-1/8	P307	.875	2 7/8	S	PB551	8
3	IS103	VS83	R1			†C451	3 1/4	3 1/2	1 1/16	3-3/16	P307	.875	2 7/8	S	PB551	6
				L360			3 1/4	3 3/4	1 1/16	2-1/8, 1-3/16	P307	.875	2 7/8	S	PB551	6
4	IS143	VS242	R7			†C721	3 3/4	4 5/8	2 1/8	4-3/16	P721	1.375	3	F	PB589	6
5	IS165	VS246	R7			†C604	3 3/8	3 7/8	1 7/8	4-3/16	P604	1.125	2 11/16	F	PB621	6
6	IS130	VS236	R6			†C795	4 1/8	5	2 1/2	4-1/4	P795	1.500	3 1/16	F	PB627	6
7	IS143	VS242	R7													
8	IS130	VS236	R6			†C695	4	5	2 1/2	4-1/4	P695	1.499	3 13/16	F	PB627	6
9	IS163	VS247	R6			†C265	5	6 7/16	3 1/4	4-1/4	P129	1.375	4 1/16	S	PB564	4
10	IS132	VS256	R7			†C425	4	5	2 1/2	4-1/4	P326	1.0625	3 5/16	S	PB517	4
11	IS137	VS333	R6			†C109	4 1/4	5 1/16	2 5/8	4-1/4	P080	1.125	3 1/16	S	PB517	4
12	IS137	VS37	R7			†C109	4 1/4	5 1/16	2 5/8	4-1/4	P080	1.125	3 1/16	S	PB517	4
13	IS140	VS396 ♂ Outer In. VS397				†C431	4 1/2	4 11/16	2 3/4	4-3/16	P722	1.187	3 3/16	WK	PB520	6
14	IS165	VS277	R87			†C366	3 5/8	4	2	3-3/16	P255	1.0625	2 11/16	WK	PB563	6
15	IS165	VS20	R12	L598		Aerotype	3 7/8	4	2 1/4	3-1/8, 1-5/16	P932	.859	3 1/16	F	PB746	4
16	IS165	VS20	R12	L381	L368	†C442	3 5/8	4	1 1/16	2-1/8, 1-5/16	P209	.859	2 15/16	F	PB546	4
17	IS105	VS301	R19	L400			3 7/8	3 11/16	1 1/16	2-1/8, 1-5/16	P400	1.000	3 1/16	F	PB605	8
				♂.135" O.S. Semi-finished							♂ Center Groove				♂.725 long	
				†L400A			3 7/8	3 11/16	1 1/16	2-1/8, 1-5/16	P675	1.000	3 1/16	F	PB641	8
				♂.075" O. S. Semi-finished							♂ Plain				♂.747 long	
				L645 Robotype			3 7/8	3 11/16	1 1/16	2-1/8, 1-5/16						
				♂.135" O.S. Semi-finished											PB652	4
				L645A Robotype			3 7/8	3 11/16	1 1/16	2-1/8, 1-5/16					♂ Use with Plain Pin	
				♂.075 O.S. Semi-finished												
				L515			3 7/8	4 1/16	1 1/16	3-1/8, 1-5/16						
						C862	3 7/8	3 11/16	1 1/16	2-1/8, 1-5/16						
18	IS110	VS220	R103			†C78	4	4 7/8	2 1/16	3-3/4	P040	1.375	3 1/2	O		
						C571(B)	4	4 7/8	2 1/16	3-3/4	P040	1.375	3 1/2	O	PB586	8
19		VS127	R18			†C20 (B)	3 3/4	3 13/16	1 1/16	3-3/4	P023	.740	3 1/2	O	PB501	8
20		VS408	R152			†C945	3 7/16	3 15/16	2 5/16	2-1/8, 1-5/16	P868	.9375	3 5/16	S	PB721	12
21		VS328	R151			†C975(B)	3 1/2	4 1/16	2.23	2-1/8, 1-5/16	P975	.865	3 5/16	O	PB747	12
						♂ Cam ground—Tin plated										
						C974(B)	3 1/2	4 1/16	2.23	2-1/8, 1-5/16	P975	.865	3 5/16	O	PB747	12
						♂ Cam ground—Not plated										
				L648			3 1/2	4 1/16	2 5/16	2-1/8, 1-5/16	P975	.865	3 5/16	O		
22		VS328	R119	Tin plated		†C900(B)	3 5/16	3 13/16	1 7/8	2-1/8, 1-5/16	P650	.990	2 15/16	O	PB623	12
						C850(B)	3 5/16	3 13/16	1 7/8	2-1/8, 1-5/16	P650	.990	2 15/16	O	PB623	12
						♂ Cam ground—Not plated										
23		VS411	R101	†L618			3 7/16	4 1/16	2 1/16	2-1/8, 2-5/16	P942	.855	3 3/16	S	PB670	6
				♂ Cam ground type but has cast relief and may be round ground.												
24		VS350	R101	†L567			3 5/16	3 13/16	2 1/4	2-1/8, 2-5/16	P880	.8556	3 7/32	S	PB670	6
				♂ Cam ground type but has cast relief and may be round ground.												
25		VS350	R101			†C864	3 5/16	3 13/16	2 1/4	2-1/8, 1-5/16	P804	.855	3 7/32	S	PB670	6
						†C895	3 5/16	3 13/16	2 1/4	2-1/8, 2-5/16	P804	.855	3 7/32	S	PB670	6
26		VS338	R101			†C761	3 7/16	3 7/8	2 1/16	2-1/8, 1-5/16	P804	.855	3 7/32	S	PB670	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	G. M. C. TRUCK	1936-38	T18, T18H, F18, F18H, 1½-4½T ⅛" O. S. Hd. for S436	Own 239	6	*S436 AS739 S487	*V436	G132	G133
2	G. M. C. TRUCK	1936-38	T33, T33H, F33, F33H, 4930 ⅛" O.S. Hd. for S436	Own 286	6	*S436 AS739 S487	*V436	G132	G133
3	G. M. C. TRUCK	1936-38	T23, T23H, F23, F23H, T73, T73H, 2-6T ⅛" O. S. Hd. for S436 Used with replacement head having Stellite seats	Own 257	6	*S436 AS739 S487 卐AS909	*V436	G132	G133
4	G. M. C. TRUCK	1935	T23, T23H, T26, T31, T33, T43, T45, T73, after Eng. 1257-9198 ⅛" O.S. Hd. for S436 Used with replacement head having Stellite seats	Own 257	6	*S436 AS739 S487 卐AS909	*V436	G132	G133
5	G. M. C. TRUCK	1930-34	T25, T26, T31, T33, T43, T44, T45, T73, T73H, Eng. 1257-8754 to 1257-9198 ⅛" O.S. Hd. for S436	Own 257	6	*S436 AS739 S487	*V436	G132	G133
6	G M. C. TRUCK	1930-34	T25, T26, T31, T33, T43, T44, T45, T73, T73H to Eng. 1257-8754 ⅛" O.S. Hd. for S436	Own 257	6	*S436 AS739 S487	*V436	G132	G133
7	G M. C. TRUCK	1937-38	T46, F46, T74, T74H, T51, T51H, 3½-8T. after Mtr. No. 1331-4478	Own 331	6	AS731 卐AS768	V732	G136	G137
8	G. M. C. TRUCK	1934-36	T43T, T46, T46H, T46W, F46, T51, T51H, T51W, T61, T74, T74H, T75, Eng. 1331-2198 to 1331-4477	Own 331	6	AS731 卐AS768	V732	G136	G137
9	G. M. C. TRUCK	1931-33	T43, T44, T45, T51, T51W, T55, T60, T61, T75, T82, T83, T90, to Eng. No. 1331-2198 1 11/32" Head Diam. ⅛" O. S. Hd. for S437-V438	Own 331	6	*S437 AS852 卐AS880 AS725 S488	*V438 V489	G136	G137
10	G. M. C. TRUCK	1938	F61, F61H, T46, F46, T61 T61H, 4-12T	Own 400	6	AS731 卐AS768	V732	G136	G137
11	G M. C. TRUCK	1935-37	T46, F46, T61, T61H, F61, F61H, F61HX, T75, T75H, T75T, T78, T83, T84SX, after Eng. No. 1400-756	Own 400	6	AS731 卐AS768	V732	G136	G137
12	G M. C. TRUCK	1932-35	T5, T61, T75, T75H, T75T, T78, T83, T84, T84SX, T90, to Eng. No. 1400-756	Own 400	6	AS731 卐AS768	V732	G136	G137
13	G. M. C. TRUCK	1938	T61, T61H, 5-12T	Own 450	6	AS731 卐AS768	V732	G136	G137
14	G M. C. TRUCK	1934-37	F61, F61H, F61HXX, T78, T78T, F79, T84, 7-19T	Own 450	6	AS731 卐AS768	V732	G136	G137
15	G. M. C. TRUCK	1931-33	T85, T95, T96	Own 468-525	6	S708 卐AS741	V709	G383	G383
16	G. M. C. TRUCK	1936-37	T85, T95, T96, T110, T130, after Mtr. No. 616-1738	Own 616	6	卐AS972	V749	G474	G383
17	G. M. C. TRUCK	1931-35	T85, T95, T96, T110, T130 to Eng. No. 616-1738 2 3/32" Head Diam. 2 1/32" Head Diam.	Own 616	6	S683 ♂ 2 3/32" Hd. Diam. S689 ♂ Fac. Duplicate 卐AS734	V684 V690	G383	G383
18	G. M. C. TRUCK	1936-37	T85, T95, T110, T130 after Eng. No. 707-902	Own 707	6	卐AS972	V749	G474	G383
19	G. M. C. TRUCK	1931-35	T85, T95, T110, T130 to Eng. No. 707-902	Own 707	6	卐AS748	V749	G383	G383

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS — STOCK NO. Alloy	Strut	Iron	PISTONS — SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS — Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS — Stock No.	No. Used
1	IS112	VS169 ♂ Outer In. VS140	R125	†L624		Aerotype	3 3/16	4 7/32	2 11/32	3-1/16, 1-3/16	P956	.9375	2 31/32	F	PB748	6
2	IS112	VS169 ♂ Outer In. VS140	R125	†L625		Aerotype	3 5/8	4 3/32	2 11/32	3-1/16, 1-3/16	P957	.9375	3 1/32	F	PB748	6
3	IS112	VS169 ♂ Outer In. VS140	R125	†L602		Aerotype	3 7/16	4 1/8	2 1/32	3-1/16, 1-3/16	P936	.9375	2 31/32	F	PB748	6
4	IS112	VS169 ♂ Outer In. VS140	R125		†C683 (B)		3 7/16	3 31/32	2 11/32	2-1/16, 1-3/16	P951	.875	2 31/32	O	PB527	12
					†C869 (B)		3 7/16	4 1/8	2 1/32	2-1/16, 1-3/16	P951	.875	2 31/32	O	PB527	12
				L629		Aerotype	3 7/16	4 1/8	2 1/32	3-1/16, 1-3/16	P951	.875	2 31/32	O		
											♂ For rods with 5/8" lock screw					
5	IS112	VS169 ♂ Outer In. VS140	R5		†C869 (B)		3 7/16	4 1/8	2 1/32	2-1/16, 1-3/16	P683	.875	2 31/32	O	PB527	12
				L629		Aerotype	3 7/16	4 1/8	2 1/32	3-1/16, 1-3/16	P683	.875	2 31/32	O		
											♂ For rods with 1/16" lock screw					
6	IS112	VS169 ♂ Outer In. VS140	R5		†C683 (B)		3 7/16	3 31/32	2 11/32	2-1/16, 1-3/16	P683	.875	2 31/32	O	PB527	12
7	IS113	VS169 ♂ Outer In. VS140 Lift. VS196	R125	†L627		Aerotype	3 3/4	4 11/32	2 11/32	3-1/16, 1-3/16	P965	1.125	3 1/4	F	PB756	6
8	IS113	VS169 ♂ Outer In. VS140	R5	†L559		Aerotype	3 3/4	4 1/4	2 7/16	3-1/16, 1-3/16	P684	.9375	3 9/32	O		
											♂ For rods with 1/8" lock screw					
											P933	.9375	3 9/32	O		
											♂ For rods with 5/16" lock screw					
9	IS113	VS169 ♂ Outer VS140 ♂ Inner Lift. VS196	R5	†L525		Aerotype	3 3/4	4 7/32	2 11/32	3-1/16, 1-3/16	P684	.9375	3 9/32	O		
					C684 (B)		3 3/4	4 7/32	2 1/4	2-1/16, 1-3/16	P684	.9375	3 9/32	O	PB650	12
				L559		Aerotype	3 3/4	4 1/4	2 7/16	3-1/16, 1-3/16	♂ For rods with 1/8" lock screw					
				♂ High Compression							P933	.9375	3 9/32	O		
											♂ For rods with 5/16" lock screw					
10	Out. VS169 In. VS140		R5	†L653		Aerotype	4 1/16	4 5/16	2 11/32	3-1/16, 1-3/16	P990	1.250	3 17/32	F	PB732	6
11		VS169 ♂ Outer In. VS140	R125	†L596		Aerotype	4 1/16	4 5/16	2 11/32	3-1/16, 1-3/16	P847	1.250	3 11/32	F	PB732	6
12		VS169 ♂ Outer In. VS140	R5	†L544		Aerotype	4 1/16	4 1/16	2 11/32	3-1/16, 1-3/16	P847	1.250	3 11/32	F	PB732	6
13	Out. VS169 In. VS140		R5	†L654		Aerotype	4 5/16	4 23/32	2 11/32	3-1/16, 1-1/4	P949	1.375	3 27/32	F	PB752	6
14	IS113	VS169 ♂ Outer In. VS140	R125	†L622		Aerotype	4 5/16	4 23/32	2 11/32	3-1/16, 2-3/16	P949	1.375	3 27/32	F	PB752	6
15		VS341 ♂ Outer In. VS342														
16		VS341 ♂ Outer In. VS342		†L518		Aerotype	4 7/16	5 5/32	2 23/32	3-1/16, 1-3/16	P772	1.375	4 11/32	F	PB669	6
17	IS116	VS341 ♂ Outer VS342 ♂ Inner		†L518		Aerotype	4 7/16	5 5/32	2 23/32	3-1/16, 1-3/16	P772	1.375	4 11/32	F	PB669	6
18		VS341 ♂ Outer VS342 ♂ Inner		†L609		Aerotype	5	5 1/32	2 17/32	3-1/16, 1-3/16	P940	1.375	4 13/32	F	PB750	6
				♂ Concave Head												
				†L610		Aerotype	5	5 1/32	2 17/32	3-1/16, 1-3/16	P940	1.375	4 13/32	F	PB750	6
				♂ Flat Head High Compression												
19	IS115	VS341 ♂ Outer VS342 ♂ Inner		†L609		Aerotype	5	5 1/32	2 17/32	3-1/16, 1-3/16	P940	1.375	4 13/32	F	PB750	6
				♂ Concave Head												
				†L610		Aerotype	5	5 1/32	2 17/32	3-1/16, 1-3/16	P940	1.375	4 13/32	F	PB750	6
				♂ Flat Head High Compression												

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

(6-1-38)

Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	G. M. C. TRUCK	1933-36	T18, T23, T33, T33L, T43, 1½-3T	Own 221	6	*S436 AS739	*V436	G132	G133
				⅛" O.S. Hd. for S436		S487			
2	G. M. C. TRUCK	1932-33	T15, T18, T19, T23	Own 200	6	*S353	V564	G319	G126
3	G. M. C. TRUCK	1931-32	T51, T55, T60, T80	Buick	6	*S437 AS853 卐AS880	*V438	G136	G137
				⅛" O.S. Hd. for S437-V438		S488	V489		
4	G. M. C. TRUCK	1929-31	T25, T26, T30, T42, T45	Buick	6	*S436 AS739	*V436	G132	G133
				⅛" O.S. Hd. for S436		S487			
5	G. M. C. TRUCK	1929-31	T11, T15, T17, T18, T19, T24	Pontiac	6	*S353	V468	G126	G126
6	G. M. C. TRUCK	1929	T60, T80	Buick	6	*S437 AS853 卐AS880	*V438	G136	G137
				⅛" O.S. Hd. for S437-V438		S488	V489		
				1 11/16" Head Diam.		AS725			
7	G. M. C. TRUCK	1928	T40, T50	Buick	6	*S398	*V399	G134	G135
				⅛" O.S. Hd. for S398-V399		S455	V456		
8	G. M. C. TRUCK	1928	T20, T21	Buick	6	*S397	*V397	G130	G131
				⅛" O.S. Hd. for S397		S454			
9	G. M. C. TRUCK	1927-28	T10, T11, T19	Pontiac	6	*S353	*V354	G126	G126
10	G. M. C. TRUCK	1927	T40, T50	Buick	6	S81	V82	G134	G135
				⅛" O.S. Hd. for S81-V82		S452	V453		
11	G. M. C. TRUCK	1927	T20, T21	Buick	6	*S87	*V87	G130	G131
				⅛" O.S. Hd. for S87		S451			
12	G. M. C. TRUCK	1925-30	K54, K56, K72, K102, K10T, K15T	Own 89	4	S118	V118	G218	G218
13	G. M. C. TRUCK	1921-25	K71, K101	Own 88	4	S118	V118	G218	G218
14	G. M. C. TRUCK	1922-28	K20, K41, K52, 2T	Own 84	4	S117	V117	G217	G217
15	G. M. C. TRUCK	1924-28	K17, K32, 1-1½T	Own 82	4	S116	V116	G217	G217
16	G. M. C. TRUCK	1921-25	K15, K16	Own 80	4	S116	V116	G217	G217
17	GOTFREDSON TR.	1932	RW84A	Buda YBUI	4	S114	V114	G202	G202
				Taper Grooved Stem		♂Grooved Stem S115	V115		
18	GOTFREDSON TR.	1928-29	36B, W, 36	Buda HS6	6	S640	V640	G240	G240
19	GOTFREDSON TR.	1927-29	W86A, 100-106, 4, 5T	Buda GL6	6	S260	V261		
20	GOTFREDSON TR.	1929	W46, W56, 2½, 3T	Buda DW6	6	S610	V610	G236	G236
21	GOTFREDSON TR.	1929	B24, 1¼T	Buda WTU	4	S111	V111	G198	G198
22	GOTFREDSON TR.	1927	41, 46, 60, 66, 2, 3T	Buda BUS	6	S205	V220	G253	G253
23	GOTFREDSON TR.	1921-27	20, 20B, 30, 1, 1½T	Buda MU	4	S111	V111	G198	G198
24	GRAHAM	1937	95 Cavalier after Mtr. 221394; 116 Supercharger after Mtr. 136292; 120 Supercharger after Mtr. 115726	Own	6	S965	V872	G473	G417
25	GRAHAM	1936-37	90, 95 Cavalier to Mtr. 221394; 116 Supercharger to Mtr. 136292; 110, 120 Supercharger to Mtr. 115726	Own	6	S890	V872	G417	G417
26	GRAHAM	1936-37	80, 85, Crusader	Own	6	S871	V872	G417	G417
27	GRAHAM	1935	74, Standard	Own	6	S871	V872	G417	G417
28	GRAHAM	1934-35	69, 75, Super Charged 8	Own	8	S873	V874	G306	G306
29	GRAHAM	1933-35	64, 67, 72, Std. 8	Own	8	S571	V572	G306	G306

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS: STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS: Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS: Stock No.	No. Used
1	IS112	VS169 ♂ Outer VS140 ♂ Inner	R5			†C820(B) C851(B) ♂ High Compression	3 1/16 3 1/16	4 13/16 4 13/16	2 5/16 2 13/16	2-1/16, 1-5/16 2-1/16, 1-5/16	P641 ♂ For rods with 1/16" lock screw P901 ♂ For rods with 5/16" lock screw	.875 .875	2 11/16 2 11/16	O O	PB608	12
2	IS100	VS51	R45			†C763	3 1/16	3 11/16	2 1/8	2-1/16, 1-5/16	P763	1.0625	3	S	PB693	12
3	IS113 In. ☞ VS140 Lift. ☞ VS196	VS169 ♂ Outer	R5	L525 ☞ Aerotype		†C684(B)	3 5/16 3 5/16	4 1/16 4 1/16	2 1/16 2 1/16	2-1/16, 1-5/16 3-1/16, 1-5/16	P684 P684	.9375 .9375	3 5/16 3 5/16	O O	PB650	12
4	IS112 In. ☞ VS140	VS169 ♂ Outer	R5			†C641(B)	3 1/16	3 11/16	2 11/16	2-1/16, 1-5/16	P641	.875	2 11/16	O	PB608	12
5	IS100	VS51	R45			†C665	3 1/16	3 11/16	2 1/8	3-5/16	P665	1.0625	3 5/16	AP	PB606	6
6	IS113	VS169 ♂ Outer VS140 ♂ Inner	R5			†C642(B)	3 5/8	4 1/16	2 1/16	2-1/16, 1-5/16	P642	.937	3 1/16	O	PB609	12
7	IS113 In. ☞ VS140	VS169 ♂ Outer	R5		L386	†C468(B)	3 1/2 3 1/2	3 13/16 4 1/16	2 5/16 2 5/16	2-1/16, 1-5/16 3-1/16, 1-5/16	P259 P259	.875 .875	3 1/16 3 1/16	O O	PB527	12
8	IS108 In. ☞ VS140	VS169 ♂ Outer	R5	L429		†C467(B)	3 1/8	3 3/4	2 5/16	3-1/8	P260	.750	2 11/16	O	PB543	12
9	IS100	VS51	R45	L364		†C471	3 1/4 3 1/4	4 1/16 4	2 5/16 2 5/16	3-5/16 4-1/8	P283 P283	1.0625 1.0625	2 11/16 2 11/16	S S	PB554 PB554	6 6
10	IS113 In. ☞ VS124	VS142 ♂ Outer	R5		L386	†C468(B)	3 1/2 3 1/2	3 13/16 4 1/16	2 5/16 2 5/16	2-1/16, 1-5/16 3-1/16, 1-5/16	P259 P259	.875 .875	3 1/16 3 1/16	O O	PB527	12
11	IS108 In. ☞ VS124	VS142 ♂ Outer	R5	L429		†C467(B)	3 1/8	3 3/4	2 5/16	3-1/8	P260	.750	2 11/16	O	PB543	12
12	IS120	VS116	R84			†C470	4 1/2	5 3/4	3	3-5/16, 1-1/4	P258	1.293	4 5/16	S	PB538	4
13	IS120	VS116	R84			†C300	4 1/2	5 3/4	3 1/4	4-1/4	P258	1.293	4 5/16	S	PB538	4
14		VS104	R83			†C299	4	5 1/4	2 7/8	4-1/4	P257	1.230	3 11/16	S	PB537	4
15		VS104	R83			†C438	3 5/16	4 1/16	2 5/16	3-5/16	P256	1.1055	3 1/4	S	PB536	4
16		VS104	R83			†C305	3 1/2	4 5/16	2 1/2	4-5/16	P256	1.1055	3 1/4	S	PB536	4
17	IS156	VS102	R7			†C210	4 1/2	6 5/16	3	4-1/4	P081	1.250	3 15/16	S	PB521	4
18	IS165	VS246	R7			†C604	3 5/8	3 7/8	1 7/8	4-5/16	P604	1.125	2 11/16	F	PB621	6
19	IS156	VS236	R6			†C898	4 1/2	6 1/4	3	4-1/4	P898	1.625	3 3/4	F		
20	IS143	VS242	R7			†C721	3 3/4	4 5/8	2 1/8	4-5/16	P721	1.375	3	F	PB589	6
21	IS165	VS106	R7			†C272	3 3/4	4 1/2	2 1/16	4-5/16	P079	1.0625	3 1/32	S	PB515	4
22	IS130	VS236	R6			†C387	4	5	2 1/2	4-1/4	P250	1.125	3 5/8	S	PB573	6
23	IS113	VS106	R7			†C132	3 5/8	4 1/2	2 1/16	4-5/16	P0123	1.0625	3 1/8	S	PB515	4
24		VS372	R122		†L637		3 1/4	3 5/8	2 1/16	2-3/32, 1-5/16, 1-3/32	P671	.8125	2 11/16	O		
25		VS372	R122		†L637		3 1/4	3 5/8	2 1/16	2-3/32, 1-3/16, 1-3/32	P671	.8125	2 11/16	O		
26		VS372	R122		†L554		3	3 1/16	2 1/16	2-1/8, 1-3/16	P614	.812	2 11/16	O		
27		VS347	R122		†L554		3	3 1/16	2 1/16	2-1/8, 1-3/16	P614	.812	2 11/16	O		
28	IS102	VS320	R72		†L458		3 1/4	3 13/32	2 3/32	2-1/8, 1-3/16	P671	.8125	2 11/16	O		
29		VS320	R72		†L447		3 1/8	3 13/32	2 3/32	2-1/8, 1-3/16	P614	.812	2 11/16	O		

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	GRAHAM	1933-35	58, 65, 68, 73, Spec. 6	Own	6	S477	V478	G171	G171
2	GRAHAM	1932	Standard Six	Own	6	S477	V478	G171	G171
3	GRAHAM	1932	57, Blue Streak	Own	8	S571	V572	G306	G306
4	GRAHAM	1931-32	56, Prosperity Six	Own	6	S477	V478	G171	G171
5	GRAHAM	1931	8-20	Own	8	S547	V548	G306	G306
6	GRAHAM	1930-31	Custom Eight	Own	8	S477	V478	G171	G171
7	GRAHAM	1930-31	Standard-Special	Own	8	S477	V478	G171	G171
8	GRAHAM	1930-31	Special Six	Own	6	S477	V478	G171	G171
9	GRAHAM	1930-31	Standard Six	Own	6	S477	V478	G171	G171
10	GRAHAM BROS. TRUCK	1927-30	All Six Cyls.	Dodge	6	S388	V389	G101	G101
11	GRAHAM BROS. TRUCK	ALL	All Four Cyls.	Dodge ⅛" O. S. Head for S29	4	*S29 S364	*V29	G100	G100
12	GRAHAM BRADLEY TRACTOR	1937-38	Row Crop, Standard	Own	6	S965	V872	G473	G417
13	GRAHAM PAIGE	1930	827, 837 after Mtr. No. 511000	Own	8	S492	V493	G259	G259
14	GRAHAM PAIGE	1929-30	827, 837 Mtr. No. 510405 to 511000	Own	8	S447	V448	G265	G265
15	GRAHAM PAIGE	1930	615	Own	6	S477	V478	G171	G171
16	GRAHAM PAIGE	1929	612 after Mtr. No. 890001	Own	6	S477	V478	G171	G171
17	GRAHAM PAIGE	1929	612 to Mtr. No. 890001	Own	6	S477	V478	G171	G171
18	GRAHAM PAIGE	1929	614	Own	6	S428	V429	G171	G171
19	GRAHAM PAIGE	1929	621	Own ⅛" O. S. Head for S479	6	S479 S510	V480	G228	G228
20	GRAHAM PAIGE	1928-29	619, 629	Own	6	S430	V431	G228	G228
21	GRAHAM PAIGE	1928-29	835	Own	8	S447	V448	G265	G265
22	GRAHAM PAIGE	1928	610	Own	6	S428	V429	G171	G171
23	GRAMM TRUCK	1937-38	30A, 2-3T	Herc. JXA	6	S701 卐AS772	V702	G386	G386
24	GRAMM TRUCK	1937-38	40A, 45A, 50A, 2½-4T	Herc. JXB	6	S701 卐AS772	V702	G386	G386
25	GRAMM TRUCK	1935-38	D, 75A, 85A, 2½-5½T	Herc. JXD	6	S701 卐AS772	V702	G386	G386
26	GRAMM TRUCK	1935-37	DX, 2½-4T	Wauk. BK	6	S780 卐AS914	V781	G421	G421
27	GRAMM TRUCK	1935-37	E, 3-4½T	Herc. WXC-3	6	S624 卐AS970	V625	G267	G267
28	GRAMM TRUCK	1935-36	EX, 3-4T	Cont. E601	6	S775	V776		
29	GRAMM TRUCK	1935-36	BXF, BF, CF, 1½-3½T	Lyc. ASD	6	S702	V704	G406	G406
30	GRAMM TRUCK	1933-38	C, CXH, 55A, 70A, 2-4½T	Herc. JXC	6	S701 卐AS772	V702	G386	G386
31	GRAMM TRUCK	1933-34	C, 2, 3T	Lyc. ASA	6	S702	V704	G406	G406
32	GRAMM TRUCK	1933-36	AX6, BX6, 1, 1½T	Cont. 25A	6	S546	V392	G229	G229
33	GRAMM TRUCK	1932-34	B, 1¾T	Lyc. 4SL	6	S318 卐AS855	V319	G168	G168
34	GRAMM TRUCK	1931-36	AX4, BX4, 1, 1½, 2T	Cont. W10	4	S586	V587		
35	GRAMM TRUCK	1931-36	CX4, 2, 3T	Cont. W20	4	S586	V587		

*Indicates 1/32" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS103	VS208	R72		†L458		3¼	3 11/16	2 3/16	2-7/64, 1-3/16	P671	.8125	2 13/16	O		
2		VS208	R72		†L458		3¼	3 11/16	2 3/16	2-7/64, 1-3/16	P671	.8125	2 13/16	O		
3		VS320	R72		†L447		3 1/8	3 11/16	2 3/16	2-7/64, 1-3/16	P614	.812	2 13/16	O		
4	IS103	VS208	R72		†L447		3 1/8	3 11/16	2 3/16	2-7/64, 1-3/16	P614	.812	2 13/16	O		
5	IS100	VS208	R72		†L447		3 1/8	3 11/16	2 3/16	2-7/64, 1-3/16	P614	.812	2 13/16	O		
6	IS103	VS208	R72		†L460		3 3/8	3 13/16	2 5/16	2-7/64, 1-3/16	P647	.859	2 7/8	F	PB600	8
7	IS103	VS208	R72		†L458		3¼	3 11/16	2 3/16	2-7/64, 1-3/16	P671	.8125	2 13/16	O		
8	IS103	VS208	R72		†L458		3¼	3 11/16	2 3/16	2-7/64, 1-3/16	P671	.8125	2 13/16	O		
9	IS103	VS208	R72		†L447		3 1/8	3 11/16	2 3/16	2-7/64, 1-3/16	P614	.812	2 13/16	O		
10	IS107	VS34	R13		†L389	C596	3 3/8	3 13/16	2 7/16	3-7/64, 1-5/32	P594	.859	2 7/8	F	PB600	8
11	IS112	VS169	R12	†L25	L370	C84	3 7/8 3 7/8 3 7/8	4 3/8 4 3/8 4 3/8	2 3/16 2 7/16 2 7/16	4-7/64 3-7/64, 1-5/32 3-7/64	P025 P025 P025	.8125 .8125 .8125	3 5/16 3 5/16 3 5/16	S S S	PB504 PB504 PB504	4 4 4
12		VS372	R122		†L627		3¼	3 5/16	2 1/16	2-5/64, 1-7/64, 1-1/16	P671	.8125	2 13/16	O		
13		VS269	R71		†L460		3 3/8	3 13/16	2 7/16	2-7/64, 1-3/16	P647	.859	2 7/8	F	PB600	8
14	IS103	VS210	R73		L460		3 3/8	3 13/16	2 7/16	2-7/64, 1-3/16	P271	.860	2 15/16	O		
15	IS103	VS208	R72		†L458		3¼	3 11/16	2 3/16	2-7/64, 1-3/16	P671	.8125	2 13/16	O		
16	IS103	VS208	R72		†L447		3 1/8	3 11/16	2 3/16	2-7/64, 1-3/16	P614	.812	2 13/16	O		
17	IS103	VS208	R72		†L448		3	3 11/16	2 3/16	2-7/64, 1-3/16	P656	.8125	2 7/16	O		
18	IS103	VS208	R74		†L447		3 1/8	3 11/16	2 3/16	2-7/64, 1-3/16	P614	.812	2 13/16	O		
19		VS209	R72		†L393		3½	4¼	2 11/16	2-7/64, 1-3/16	P597	1.000	2 11/16	O		
20	IS113	VS209	R74		†L393		3½	4¼	2 11/16	2-7/64, 1-3/16	P597	1.000	2 11/16	O		
21	IS103	VS210	R73		†L460		3 3/8	3 13/16	2 7/16	2-7/64, 1-3/16	P647	.859	2 7/8	F	PB600	8
22	IS103	VS208	R74		†L395		2 7/8	3 11/16	2 3/16	2-7/64, 1-3/16	P611	.812	2 5/8	O		
23	IS131	VS353	R126	L561 ♂ Aerotype		†C812(B)	3 3/8	4 3/8	2 7/16	3-7/64, 1-3/16	P812	1.000	2 13/16	O		
24	IS131	VS353	R126	†L562 ♀ Aerotype		C845(B)	3 5/8 3 5/8	4 7/16 4 5/8	2 7/16 2 7/16	3-7/64, 1-7/64 3-7/64, 1-3/16	P845 P845	1.000 1.000	3 5/16 3 5/16	O O		
25	IS131	VS353	R126	†L603 ♀ Aeretype			4	4 5/16	2 5/16	3-7/64, 1-3/16	P937	1.000	3½	O		
26	IS145	VS414	R149	†L605 ♀ Aerotype			3 3/4	4 5/8	2 11/16	3-7/64, 1-3/16	P939	1.000	3 11/16	F	PB729	6
27	IS109	VS334	R146			C920(B)	4¼	4 5/16	2 5/16	4-5/16	P785	1.125	3 5/8	O		
28	IS132	VS221				†C981	3 7/8	5 5/16	3 5/16	3-5/16, 1-¼	P980	1.250	3 5/16	F		
29	IS132					†C859	3 3/4	4¼	2½	2-7/64, 2-5/16	P790	1.000	3 5/16	F		
30	IS131	VS353	R126	†L563 ♀ Aerotype		†C813(B)	3 3/4 3 3/4	4 1/16 4 1/16	2 1/16 2 1/16	3-7/64, 1-3/16 3-7/64, 1-3/16	P813 P813	1.000 1.000	3 3/16 3 3/16	O O		
31	IS132		R72			†C783(B)	3 5/8	4¼	2½	2-7/64, 2-5/16	P783	1.000	3 1/16	O		
32	IS147		R12		L389	†C596	3 3/8	3 13/16	2 7/16	3-7/64, 1-5/32	P594	.859	2 7/8	F	PB600	6
33	IS103	VS33	R1		†L397	C739(B)	3 1/4 3 1/4	3 11/16 4	2 5/16 2 5/16	2-7/64, 2-5/16 2-7/64, 1-3/16	P613 P613	.875 .875	2 15/16 2 15/16	O O	PB527	12
34	IS165	VS160	R12	L523 ♀ Aerotype			3 7/8	4 5/16	2 5/16	3-7/64, 1-3/16	P796	1.000	3 3/8	F	PB585	4
35	IS165	VS115	R12													

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

(6-1-38)

Gr-Ha

Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	GRAMM TRUCK	1932-33	CX6, 2T	Cont. 16C	6	S641	V344	G225	G225
2	GRAMM TRUCK	1932-38	G, GY, GYB, DF, GW, 2½-7½T	Cont. 21R	6	S639	V639		
						♂⅜" Stem 45° Seat			
			Single Groove 1/16" Stem 45° Seat‡			S673	V674	G313	G314
			Single Groove 1/16" Stem 60° Seat‡			S1015	V776	♂1/16" I.D.	
			Double Groove 1/16" Stem 60° Seat‡			S1016	V1018		
			Aerotype for S1016‡			卐AS1017			
3	GRAMM TRUCK	1929-38	CXF, 190, EY190, 2-3T	Cont. 20R	6	S639	V639		
						♂⅜" Stem 45° Seat			
			Single Groove 1/16" Stem 45° Seat‡			S673	V674	G313	G314
			Single Groove 1/16" Stem 60° Seat‡			S1015	V776	♂1/16" I.D.	
			Double Groove 1/16" Stem 60° Seat‡			S1016	V1018		
			Aerotype for S1016‡			卐AS1017			
4	GRAMM TRUCK	1928-33	T48, 060, E330, 564N	Lyc. TS	6	S601	V602	G166	G166
5	GRAMM TRUCK	1929-30	60, 5, 5½T	Herc. G	4	S600	V600	G414	G414
6	GRAMM TRUCK	1926-27	115, 116	Cont. 8U	6	S343	V344	G225	G225
7	GRAMM TRUCK	1927-29	668, 3T	Herc. L	4	S600	V600	G414	G414
8	GRAMM BUS	1932	EYB, 21 Pass.	Cont. 20R	6	S639	V639		
						♂⅜" Stem			
			45° Seat‡			S673	V674	G313	G314
						♂1/16" Stem		♂1/16" I. D.	
9	GRAMM BUS		RA, 17 Pass.	Lyc. TS	6	S601	V602	G166	G166
10	GRAMM BUS		R, 17-21 Pass.	Cont. 6B	6	S287	V287	G189	G189
						♂Grooved Stem			
			Taper Grooved Stem‡			S288	V288		
11	GRAMM BERNSTEIN TRUCK	1930	C6, 2½, 3T	Cont. 6B	6	S287	V287	G189	G189
						♂Grooved Stem			
			Taper Grooved Stem‡			S288	V288		
12	GRAMM BERNSTEIN TRUCK	1929-30	115S, 2T	Cont. 15C	6	S641	V344	G225	G225
13	GRAMM BERNSTEIN TRUCK	1929	50, 5T	Cont. B7	4	S129	V129	G193	G193
14	GRAMM BERNSTEIN TRUCK	1929	30, 3T	Cont. L4	4	S101	V101	G193	G193
						♂Grooved Stem			
			Taper Grooved Stem‡			S608	V608		
15	GRAMM BERNSTEIN TRUCK	1926-29	125, 2½T	Cont. S4	4	S263	V263		
16	GRAMM BERNSTEIN TRUCK	1924-29	56, 50, 7T	Cont. B5	4	S129	V129	G193	G193
17	GRAMM BERNSTEIN TRUCK	1923-29	20, 125, C, 2, 2½T, 3T	Cont. K4	4	S107	V107	G193	G193
18	GRAMM BERNSTEIN TRUCK	1929	10, 1T	Lyc. CT	4	S326	V326	G166	G166
						♂Nar. Gr. 1/32" from end			
			Wide Gr. 1/32" from end‡			S375	V375		
			Wide Gr. 1/32" from end‡			S51	V51		
19	GRAMM BERNSTEIN TRUCK	1928	115, 115S, 1½T, 2T	Cont. 11U	6	S343	V344	G225	G225
20	HAHN TRUCK	1937-38	H9, H11, H13, H18, 1½-2½T	Wauk. BL	6	S780	V781	G421	G421
						卐AS914			
21	HAHN TRUCK	1935-38	HB3, HB4, HB5, HB6, H22, 2-3T	Wauk. BK	6	S780	V781	G421	G421
						卐AS914			
22	HAHN TRUCK	1931-38	250, 300, HD2, HD3, M20, M22, M25, M26, 3-6T	Wauk. MZ	6	S712	V612	G413	G413
23	HAHN TRUCK	1931-38	440, 5, 6T	Wauk. SRK	6	S722	V723	G330	G331
						卐AS752			
24	HAHN TRUCK	1931	317H, 37, 1½, 2T	Cont. 16C	6	S641	V344	G225	G225
25	HAHN TRUCK	1929-31	39HL, 47HB, 47B, 47D	Cont. 16R-18R	6	S639	V639		
						♂⅜" Stem			
						S673	V674	G313	G314
						♂1/16" Stem		♂1/16" I. D.	

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS165	VS231	R12		†L389	C596	3⅜	3 1/16	2 1/16	3-1/8, 1-5/32	P594	.859	2⅞	F	PB600	6
2	IS130	VS221 ♂ Outer VS283 ♂ Inner R159	R13			†C776	4⅜	4 13/16	2¾	3-3/16, 1-¼	P776	1.250	3 11/32	F	PB617	6
						†C823	4⅜	5 3/16	2¾	1-3/16, 2-5/32, 1-¼	P776	1.250	3 11/32	F	PB617	6
3	IS130	VS221 ♂ Outer VS283 ♂ Inner R159	R13			†C714	4⅛	4 11/16	2⅞	3-3/16, 1-¼	P709	1.250	3 13/32	F	PB617	6
						†C822	4⅛	5 5/16	2⅞	2-3/16, 1-5/32, 1-¼	P709	1.250	3 13/32	F	PB617	6
4	IS114					†C679	3⅞	4⅜	2⅜	4-3/16	P679	1.125	3 5/16	S	PB562	6
5	IS153	VS203	R89			†C682 (B)	4¾	5¼	2½	4-3/16	P682	1.500	4¼	O		
6	IS165	VS202	R12			†C479	3¼	3¾	2 5/16	3-3/16	P282	1.000	2 13/16	S	PB558	6
					L433		3¼	3¾	2 5/16	3-1/8, 1-5/32	P518	1.000	2¾	F	PB558	6
7	IS153	VS203	R89			†C681 (B)	4½	5¼	2½	4-3/16	P681	1.500	4	O		
8	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C714	4⅛	4 11/16	2⅞	3-3/16, 1-¼	P709	1.250	3 13/32	F	PB617	6
						†C822	4⅛	5 5/16	2⅞	2-3/16, 1-5/32, 1-¼	P709	1.250	3 13/32	F	PB617	6
9	IS114					†C679	3⅞	4⅜	2⅜	4-3/16	P679	1.125	3 5/16	S	PB562	6
10	IS143	VS92 ♂ Outer VS108 ♂ Inner	R34 R98			†C312	3¾	4½	2⅝	3-3/16	P085	1.125	3 5/16	S	PB532	6
11	IS143	VS92 ♂ Outer VS108 ♂ Inner	R34 R98			†C312	3¾	4½	2⅝	3-3/16	P085	1.125	3 5/16	S	PB532	6
12	IS165	VS231	R12		†L389	C596	3⅜	3 1/16	2 5/16	3-1/8, 1-5/32	P594	.859	2⅞	F	PB600	6
13	IS156	VS70	R90			†C418	5	5⅞	3 9/32	4-¼	P288	1.500	4 9/16	S	PB578	4
14	IS140	VS67	R90 R91			†C158	4½	5 1/16	5⅝	4-¼	P149	1.375	4	S	PB580	4
15	IS137	VS198	R34			†C473	4¼	4¾	2⅞	3-¼	P277	1.500	3 13/32	F	PB574	4
16	IS156	VS70	R90			†C271	4¾	6⅛	3½	4-¼	P150	1.500	4¼	S	PB578	4
17	IS137	VS73	R90			†C218	4⅛	5 7/16	3⅜	4-¼	P148	1.250	3 1/16	S	PB579	4
18	IS132	VS47	R26 R26			†C281	3¾	4⅛	2⅛	4-⅛	P292	1.125	3 5/16	O		
19	IS165	VS231	R12			†C479	3¼	3¾	2 5/16	3-3/16	P282	1.000	2 13/16	S	PB558	6
					L433		3¼	3¾	2 5/16	3-1/8, 1-5/32	P518	1.000	2¾	F	PB558	6
20		VS414	R149													
21	IS145	VS414	R149	†L605		Aerotype	3¾	4⅝	2 11/32	3-1/8, 1-3/16	P939	1.000	3 11/32	F	PB729	6
22	IS136	VS359	R28			C905 (B)	4¼	4⅝	2 11/32	3-1/8, 1-3/16	P677	1.000	3⅝	O		
23	IS106	VS373	R28	†L569		Aerotype	4⅝	5¼	2⅞	3-5/32, 1-3/16	P877	1.375	4 23/32	F	PB730	6
24	IS165	VS231	R12		†L389	C596	3⅜	3 1/16	2 5/16	3-1/8, 1-5/32	P594	.859	2⅞	F	PB600	6
25	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C709	4	4 29/32	2 21/32	3-3/16, 1-¼	P709	1.250	3 13/32	F	PB617	6
						†C821	4	5 3/32	2 21/32	1-3/16, 2-5/32, 1-¼	P709	1.250	3 13/32	F	PB617	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Ha-He Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES Exhaust	VALVES Intake	VALVE GUIDES Exh.	VALVE GUIDES Int.
1	HAHN TRUCK	1929	17H, 1½T	Cont. 18E	6	S391	V392	G229	G229
2	HAHN TRUCK	1929	7H, 1T	Cont. 29L	6	S357	V358	G184	G184
3	HAHN TRUCK	1928-29	SJ6, 1½, 2T	Buda HS6	6	S640	V640	G240	G240
4	HAHN TRUCK	1928-29	76, 3½T	Herc. YXC	6	S619 ♂Drilled Stem	V619	G267	G266
				Slotted Stem*		S659	V659		
5	HAHN TRUCK	1927	B2, O, 1¼, 1½T	Herc. OX	4	S199	V199	G266	G266
				1/8" O. S. Head for S199*		S680			
6	HAHN TRUCK	1923-27	L, N, 3, 5T	Cont. L4	4	S101 ♂Grooved Stem	V101	G193	G193
				Taper Grooved Stem*		S608	V608		
7	HAHN & SELDEN TRUCK	1932	67, 5T	Cont. 21R	6	S673	V674	G313	G314
8	HAHN & SELDEN TRUCK	1932	317H, 37, 1½, 2T	Cont. 16C	6	S641	V344	G225	G225
9	HAHN & SELDEN TRUCK	1932	17, 1½T	Cont. 18E	6	S391	V392	G229	G229
10	HAHN & SELDEN TRUCK	1932	7H, 1T	Cont. 29L	6	S357	V358	G184	G184
11	HAHN & SELDEN TRUCK	1932	39, 47B, 47D, 2½, 3, 4T	Cont.16R-18R	6	S639 ♂⅜" Stem	V639		
						S673 ♂7/16" Stem	V674	G313 ♂7/16" I. D.	G314
12	HALL SCOTT MTR.		130, 135	Own	6	S1026	V1027		
13	HALL SCOTT MTR.		160, 166	Own	6	S1025	V1025		
14	HALL SCOTT MTR.	1930-34	175	Own	6	S705	S705		
				1/8" O. S. Head for S705*		S713	S713		
15	HALL SCOTT MTR.	1929-33	151	Own	4	S655	S655		
				1/8" O. S. Head for S655*		S656	S656		
16	HALL SCOTT MTR.	1922-30	50, 75	Own	4-6	S152	V152	G161	G162
				1/4" O. S. Hd. for S-V152*		S606	V606		
				1/4" O. S. Head for S606*		S217			
17	HART PARR TRAC.		See Oliver Hart Parr						
18	HENDERSON MOTORCYCLE	1929-31	KJ	Own	4				
19	HENDERSON MOTORCYCLE	1920-28	K	Own	4	S229	V229		
20	HENDERSON MOTORCYCLE	1918-24	AH	Own	4	S229	V229		
21	HERCULES MTR.	1936-38	QXA, QXB, QXC	Own	6	S967	V968	G429	G429
22	HERCULES MTR.	1935-38	IXB, IXC	Own	4	S907	V908	G429	G429
23	HERCULES MTR.		GX, HX, Series A, B, C, D, E	Own	6	S1028	V1029		
24	HERCULES MTR.		RXC	Own	6	S659	V659	G267	G266
25	HERCULES MTR.		WXLC, WXLC3	Own	6	S624 卐AS970	V625	G267	G266
26	HERCULES MTR.	1929-36	OOA	Own	4	S735	V736	G386	G386
27	HERCULES MTR.	1929-34	YXA	Own	6	S619 ♂Drilled Stem	V619	G267	G266
						S659 ♂Slotted Stem	V659		
28	HERCULES MTR.	1929-36	WXA, WXD	Own	6	S624 卐AS970	V625	G267	G267
29	HERCULES MTR.	1935-38	IXA, IXAC	Own	4	S907	V908	G429	G429
30	HERCULES MTR.	1929-38	JXA	Own	6	S701 卐AS772	V702	G386	G386
31	HERCULES MTR.	1929-38	WXA2	Own	6	S624 卐AS970	V625	G267	G267

*Indicates 1/32" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS — STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS135	VS231	R12		†L389	C596	3⅜	3 11/16	2 1/16	3-⅛, 1-5/32	P594	.859	2⅞	F	PB600	6
2	IS100	VS251	R12			†C472	2⅞	3 3/32	1 31/32	2-⅛, 1-3/16	P701	.734	2 13/32	F	PB552	6
3	IS165	VS246	R7			†C604	3⅜	3⅞	1⅞	4-3/16	P604	1.125	2 13/16	F	PB621	6
4	IS130	VS334				†C786(B)	4⅜	4⅞	2 1/16	4-3/16	P786	1.250	3 11/16	O	PB672	12
5	IS111	VS205	R14			†C313(B)	4	4⅞	2 1/16	3-¼	P940	1.375	3½	O	PB586	8
6	IS140	VS67	R90 R91			†C158	4½	5 11/16	3⅝	4-¼	P149	1.375	4	S	PB580	4
7	IS130 Out. ♂ VS221 In. ♂ VS283					†C776 †C823	4⅜ 4⅜	4 13/16 5 1/16	2¾ 2¾	3-3/16, 1-¼ 1-3/16, 2-5/32, 1-¼	P776 P776	1.250 1.250	3 13/16 3 13/16	F F	PB617 PB617	6 6
8	IS165	VS231	R12		†L389	C596	3⅜	3 11/16	2 1/16	3-⅛, 1-5/32	P594	.859	2⅞	F	PB600	6
9	IS135	VS231	R12		†L389	C596	3⅜	3 11/16	2 1/16	3-⅛, 1-5/32	P594	.859	2⅞	F	PB600	6
10	IS100	VS251	R12			†C472	2⅞	3 3/32	1 31/32	2-⅛, 1-3/16	P701	.734	2 13/32	F	PB552	6
11	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C709 †C821	4 4	4 13/32 5 5/32	2 17/32 2 17/32	3-3/16, 1-¼ 1-3/16, 2-5/32, 1-¼	P709 P709	1.250 1.250	3 13/16 3 13/16	F F	PB617 PB617	6 6
12																
13																
14	IS141														PB707	6
15	IS119	VS239 ♂ Outer VS240 ♂ Inner		†L490 ♂ Aerotype EP8—Aluminum pin retainer.			4¼	5 5/32	2⅝	5-⅛, 1-3/16	P304	1.250	3 13/16	F	PB611	4
16				†L304 ♂ Aerotype ♂ Concave Head EP8—Aluminum pin retainer.			4¼	4 7/8	2 1/16	5-⅛, 1-3/16	P304	1.250	3 13/16	F	PB611	4-6
17																
18				†L513			2 11/16	2¾	1 5/16	3-⅛	P753	.734	2⅝	F		
19				†L512			2 11/16	2¾	1 5/16	3-⅛	P324	.625	2¼	O		
20				L324			2 11/16	3 1/16	1⅝	4-⅛	P324	.625	2¼	O		
21		VS419	R153													
22		VS380	R133													
23	Out. ♂ VS433 In. ♂ VS434		R161													
24	IS130	VS334	R146								P818	1.250	4 5/16	O		
25	IS109	VS334	R146													
26	IS106	VS353														
27	IS130	VS334	R146													
28	IS109	VS334	R146													
29		VS380	R133	†L619 ♂ Aerotype			3	2 11/16	1 7/16	2-⅛, 1-3/16	P946	.750	2 5/16	O		
30	IS131	VS353	R126	†L561 ♂ Aerotype		†C812(B)	3⅜	4⅜	2 3/16	3-⅛, 1-3/16	P812	1.000	2 13/16	O		
31	IS109	VS334	R146			†C810(B)	3½	4	2 5/16	3-5/16	P810	1.125	3⅛	O		

Chrome-plated Piston Pins cost no more than ordinary Pins

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

(6-1-38)

He-Hu Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES Exhaust	VALVES Intake	VALVE GUIDES Exh.	VALVE GUIDES Int.
1	HERCULES MTR.	1929-38	JXB	Own	6	S701 卐AS772	V702	G386	G386
2	HERCULES MTR.	1929-38	JXC	Own	6	S701 卐AS772	V702	G386	G386
3	HERCULES MTR.	1929-36	OOB	Own	4	S735 ♂Drilled Stem S701	V736 V702	G386	G386
				Slotted Stem					
4	HERCULES MTR.	1929-36	WXB	Own	6	S624 卐AS970	V625	G267	G267
5	HERCULES MTR.	1935-38	JXD	Own	6	S701 卐AS772	V702	G386	G386
6	HERCULES MTR.	1922-36	O, OBX, OX	Own	4	S199 S680	V199	G266	G267
				1/8" O. S. Head for S199					
7	HERCULES MTR.	1928-36	YXB	Own	6	S619 ♂Drilled Stem S659	V619 V659	G267	G266
				Slotted Stem					
8	HERCULES MTR.	1929-36	OOC	Own	4	S735 ♂Drilled Stem S701 卐AS772	V736 V702	G386	G386
				Slotted Stem					
9	HERCULES MTR.	1929-36	WXC	Own	6	S624 卐AS970	V625	G267	G267
10	HERCULES MTR.	1929-38	WXC2	Own	6	S624 卐AS970	V625	G267	G267
11	HERCULES MTR.	1930-38	WXC-3, WXT	Own	6	S624 卐AS970	V625	G267	G267
12	HERCULES MTR.	1927-38	K	Own	4	S600	V600	G414 ♂Plain G415	G414 G415
							Flanged		
13	HERCULES MTR.	1929-36	YXC	Own	6	S619 ♂Drilled Stem S659	V619 V659	G267	G266
				Slotted Stem					
14	HERCULES MTR.	1929-37	YXC2	Own	6	S619 ♂Drilled Stem S659	V619 V659	G267	G266
				Slotted Stem					
15	HERCULES MTR.	1930-37	RXB	Own	6	S659	V659	G267	G266
16	HERCULES MTR.	1927-38	L	Own	4	S600	V600	G414 ♂Plain G415	G414 G415
							Flanged		
17	HERCULES MTR.	1929-36	YXC3	Own	6	S619 ♂Drilled Stem S659	V619 V659	G267	G266
				Slotted Stem					
18	HERCULES MTR.	1927-38	G	Own	4	S600	V600	G414 ♂Plain G415	G414 G415
							Flanged		
19	HOLT TRACTOR		45HP	Own	4	S272 ♂Threaded Stem	S272		
20	HOLT TRACTOR	1922-26	2 Ton, T35	Own	4	S235 ♂Grooved Stem	V235	G323	G323
21	HOLT TRACTOR		M12, 25-40, T11, 5 Ton	Own	4	S169	V169	G329	G329
22	HOLT TRACTOR		10 Ton, Caterpillar	Own	4	S168	V168	G277	G277
23	HOLT TRACTOR		10 Ton, Artillery	Own	4	S210	V210	G277	G277
24	HOLT TRACTOR		10 Ton	Own	4			G277	G277
25	HOLT COMBINE	1926-28	34 Prairie, 12-15 Cut	Wisc. C1	4	S120	V120	G328	G328
26	HOLT COMBINE		34	Wisc. CA1	4	S921	V921	G328	G328
27	HOLT COMBINE		32, Hillside, 12-15 Cut	Wisc. SU	4	S234 ♂Short Stem S120	V234 V120	G328	G328
				Long Stem					
28	HOLT COMBINE		16½-20 Cut	Wisc. C2	4	S921	V921	G328	G328
29	HUBER TRACTOR	1935-36	Modern Farmer, S, SC	Wauk. VIS	4	S919 ♂2" Head Diam. S920	V919	G437	G437
				1¾" Head Diam.					

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS							PISTON PINS				PIN BUSHINGS	
				STOCK NO.			SPECIFICATIONS									
				Alloy	Strut	Iron	Diam.	Lgth.	Comp.	Rings Used	Stock No.	Diam.	Lgth.	Type	Stock No.	No. Used
1	IS131	VS353	R126	†L562 Aerotype			3⅝	4 1/16	2 3/16	3-1/16, 1-1/16	P845	1.000	3 5/32	O		
						†C845(B)	3⅝	4⅛	2 3/16	3-1/16, 1-1/16	P845	1.000	3 5/32	O		
2	IS131	VS353	R126	†L563 Aerotype			3¾	4⅛	2⅛	3-1/16, 1-1/16	P813	1.000	3⅜	O		
						†C813(B)	3¾	4⅛	2⅛	3-1/16, 1-1/16	P813	1.000	3⅜	O		
3	IS106	VS353				†C813(B)	3¾	4⅛	2⅛	3-1/16, 1-1/16	P813	1.000	3⅜	O		
			R126	L563 Aerotype			3¾	4⅛	2⅛	3-1/16, 1-1/16	P813	1.000	3⅜	O		
4	IS109	VS334	R146			†C784(B)	3¾	4 1/16	2 1/16	4-1/16	P784	1.125	3⅝	O		
5	IS131	VS353	R126	†L603 Aerotype			4	4 1/16	2 1/16	3-1/16, 1-1/16	P937	1.000	3½	O		
6	IS111	VS205	R14			†C313(B)	4	4⅛	2 1/16	3-¼	P040	1.375	3½	O	PB586	8
7	IS130	VS334				†C629(B)	4	4⅛	2 1/16	4-1/16	P334	1.250	3 1/16	O	PB672	12
			R146													
8	IS106	VS353				†C844(B)	4	4 1/16	2⅛	3-1/16, 1-1/16	P677	1.000	3⅝	O		
			R126													
9	IS109	VS334	R146	†L571 Aerotype			4	4⅜	2 1/16	3-1/16, 1-1/16	P785	1.125	3⅝	O		
				♂ Use with Rod Number 18890CSY												
						†C785(B)	4	4 1/16	2 1/16	4-1/16	P785	1.125	3⅝	O		
						♂ Use with Rod Number 18790CSY										
10	IS109	VS334	R146			†C811(B)	4⅛	4 1/16	2 1/16	4-1/16	P785	1.125	3⅝	O		
11	IS109	VS334	R146			†C920(B)	4¼	4 1/16	2 1/16	4-1/16	P785	1.125	3⅝	O		
12	IS153	VS203	R89			†C680(B)	4¼	5¼	2½	4-1/16	P680	1.500	3¾	O		
13	IS130	VS334				†C786(B)	4⅜	4⅛	2 1/16	4-1/16	P786	1.250	3 1/16	O	PB672	12
			R146													
14	IS130	VS334				†C787(B)	4½	4⅜	2 1/16	4-1/16	P786	1.250	3 1/16	O	PB672	12
			R146	†L604 Aerotype			4½	4⅜	2 1/16	3-1/16, 1-1/16	P786	1.250	3 1/16	O		
15	IS130	VS334	R146	†L604 Aerotype			4½	4⅜	2 1/16	3-1/16, 1-1/16	P786	1.250	3 1/16	O		
16	IS153	VS203	R89			†C681(B)	4½	5¼	2½	4-1/16	P681	1.500	4	O		
17	IS130	VS334				†C818(B)	4⅝	4⅛	2 1/16	4-1/16	P818	1.250	4 3/16	O		
			R146													
18	IS153	VS203	R89			†C682(B)	4¾	5¼	2½	4-1/16	P682	1.500	4¼	O		
19				*Raise each unit sale by suggesting correlated parts*												
20	IS109					†C259	4	4½	2⅛	4-3/16	P342	1.250	3 1/16	F	PB651	4
21	IS156					†C748	4¾	6 3/16	3 11/16	3-¼	P132	1.375	4 1/16	S	PB523	4
22																
23																
24						†C260	6½	6	3	3-⅜	P345	1.9375 1.875	5½	S		
25	IS130					†C925	4⅛	4 3/32	2 3/32	3-3/16	P297	1.0625	3 1/16	WK	PB565	4
26	IS165														PB565	4
27	IS165	VS393				†C296	4	4¼	2⅛	3-3/16	P297	1.0625	3 1/16	WK	PB565	4
28	IS165					†C926	4½	5 11/32	2 11/32	3-¼	P722	1.187	3 13/32	WK	PB520	4
29	IS130	VS391	R28			†C979	4⅛	4⅛	2 3/32	4-3/16	P979	1.3125	3⅜	S	PB742	4
				Sleeve Assembly SA46												

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Hu-Hu Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	HUBER TRACTOR	1926-36	Super Four, 32-45	Stearns DU	4	S645	S645	G366	G366
2	HUBER TRACTOR	1926-36	Super Four, 40-62	Stearns EU	4	S645	S645	G366	G366
3	HUDSON	1938	83, Six (89, 112" W.B.)	Own	6	S995	V996	G477	G478
4	HUDSON	1938	84, 85, 87, Eight	Own	8	S993	V994	G477	G478
5	HUDSON	1936-37	63, 73	Own	6	S884	V885	G404	G405
6	HUDSON	1936-37	64, 65, 66, 67, 74, 75, 76, 77	Own	8	S886	V887	G404	G405
7	HUDSON	1935	Big Six, GH	Own	6	S825	V826	G115	G115
8	HUDSON	1935	Spec. De Luxe, Custom	Own	8	S824	V518	G115	G115
9	HUDSON	1934	Eight, LT, LL	Own	8	S824	V518	G115	G115
10	HUDSON	1932-33	Great Eight, Terraplane	Own	8	*S302	V518	G115	G115
				⅛" O. S. Head for S302		S441			
11	HUDSON	1933	Super Six	Own	6	*S555	*V569	G115	G115
12	HUDSON	1931	Great Eight	Own	8	*S302	V518	G115	G115
				⅛" O. S. Head for S302		S441			
13	HUDSON	1930	Great Eight	Own	8	*S302	V518	G115	G115
				⅛" O. S. Head for S302		S441			
14	HUDSON	1929	Super Six Mtr. 533050 and up	Own	6	S382	V383	G117	G119
15	HUDSON	1928-29	Super Six Mtr. 478679 to 533050	Own	6	S382	V383	G117	G119
16	HUDSON	1927	Super Six Mtr. 439230 to 478679	Own	6	S393	V394	G118	G119
17	HUDSON	1923-26	Super Six	Own	6	S28	V38	G116	G116
18	HUDSON	1916-22	H, J, M, O, Super Six	Own	6	S38	V38	G116	G116
19	HUG TRUCK	1936-38	42, 42A, 42T, 3-6T	Buda K369	6	S706	V707	G396	G397
20	HUG TRUCK	1935-38	12D, 15A, 15D, 15T, 1½-2½T	Wauk. BL	6	S780 卐AS914	V781	G421	G421
21	HUG TRUCK	1935-38	19A, 19D, 19T, 2½-5T	Wauk. BK	6	S780 卐AS914	V781	G421	G421
22	HUG TRUCK	1932-38	41S, 87K, 43, 87Q, 43A, 3, 8T	Buda K428	6	S706	V707	G396	G397
23	HUG TRUCK	1932-38	61, 62, 67, 23, 23S, 42, 2½ 5T	Buda H298	6	S696	V697	G396	G397
24	HUG TRUCK	1932-34	98, 99, 7½, 10T	Buda GF6	6	S260	V261		
25	HUG TRUCK	1932	85, 85D, 2½T	Buda KBU1	4	S257			
26	HUG TRUCK	1930-32	97, C97, 5T	Buda BA6	6	S661	V220	G252	G253
27	HUG TRUCK	1928-32	22, 25, 26, 1½, 2T	Buda HS6	6	S640	V640	G240	G240
28	HUG TRUCK	1928-32	26, 86, 40, 41, 90, C87, 87M	Buda DW6	6	S610	V610	G236	G236
29	HUG TRUCK	1925-32	HA, H4, 60, 2½T	Buda WTU	4	S111	V111	G198	G198

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-33)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1						†C930	5⅛	6	3⅝	4-$\frac{5}{64}$	P930	1.625	4⅝	S	PB745	4
2							5½									
3		VS335	R16	†L552 ♂This piston not supplied in round ground type.			Cam Ground Type 3	3$\frac{5}{16}$	1$\frac{11}{16}$	2-$\frac{5}{64}$, 2-$\frac{5}{64}$	P724	.750	2$\frac{7}{16}$	F	PB505	6
4		VS335	R16	†L552 ♂This piston not supplied in round ground type.			Cam Ground Type 3	3$\frac{5}{16}$	1$\frac{11}{16}$	2-$\frac{5}{64}$, 2-$\frac{5}{64}$	P724	.750	2$\frac{7}{16}$	F	PB505	8
5	IS102	VS335	R124	†L552 ♂This piston not supplied in round ground type.			Cam Ground Type 3	3$\frac{5}{16}$	1$\frac{11}{16}$	2-$\frac{5}{64}$, 2-$\frac{5}{64}$	P724	.750	2$\frac{7}{16}$	F	PB505	6
6	IS102	VS335	R124	†L552 ♂This piston not supplied in round ground type.			Cam Ground Type 3	3$\frac{5}{16}$	1$\frac{11}{16}$	2-$\frac{5}{64}$, 2-$\frac{5}{64}$	P724	.750	2$\frac{7}{16}$	F	PB505	8
7		VS335	R16	†L552 ♂This piston not supplied in round ground type.			Cam Ground Type 3	3$\frac{5}{16}$	1$\frac{11}{16}$	2-$\frac{5}{64}$, 2-$\frac{5}{64}$	P724	.750	2$\frac{7}{16}$	F	PB505	6
8	IS102	VS335	R16	†L552 ♂This piston not supplied in round ground type.			Cam Ground Type 3	3$\frac{5}{16}$	1$\frac{11}{16}$	2-$\frac{5}{64}$, 2-$\frac{5}{64}$	P724	.750	2$\frac{7}{16}$	F	PB505	8
9	IS102	VS335	R16	†L517 L582 Same as L517 except relieved for round grinding.			Cam Ground Type 3	3$\frac{5}{16}$	1$\frac{11}{16}$	2-$\frac{5}{64}$,1-$\frac{3}{16}$,1-$\frac{5}{64}$	P724	.750	2$\frac{7}{16}$	F	PB505	8
10	IS102	VS313	R16	†L517 L582 Same as L517 except relieved for round grinding.			Cam Ground Type 3	3$\frac{5}{16}$	1$\frac{11}{16}$	2-$\frac{5}{64}$,1-$\frac{3}{16}$,1-$\frac{5}{64}$	P724	.750	2$\frac{7}{16}$	F	PB505	8
11	IS102	VS290	R16	†L516 L581 Same as L516 except relieved for round grinding.			Cam Ground Type 2$\frac{11}{16}$	3$\frac{5}{16}$	1$\frac{11}{16}$	2-$\frac{5}{64}$,1-$\frac{3}{16}$,1-$\frac{5}{64}$	P724	.750	2$\frac{7}{16}$	F	PB505	6
12	IS102	VS290	R102	†L484 L580 Same as L484 except relieved for round grinding.			Cam Ground Type 2⅞	3$\frac{5}{16}$	1$\frac{11}{16}$	2-$\frac{5}{64}$,1-$\frac{3}{16}$,1-$\frac{5}{64}$	P708	.750	2⅝	F	PB505	8
13	IS102	VS167	R16	†L473			2¾	3$\frac{1}{16}$	1$\frac{11}{16}$	4-⅛	P123	.750	2$\frac{7}{16}$	F	PB505	8
14		VS71 ♂Exh. VS76 ♂Int. Out VS134 ♂Int. In.	R17 ♂Exh. R15 ♂Int.	L7	†L371	C564	3½	4$\frac{1}{16}$	2¼	3-⅛	P185	1.0937	2$\frac{11}{16}$	F	PB595	6
15		VS71 ♂Exh. VS76 ♂Int. Out VS134 ♂Int. In.	R17 ♂Exh. R15 ♂Int.	L7	†L371	C564	3½	4$\frac{1}{16}$	2¼	3-⅛	P185	1.0937	2$\frac{11}{16}$	F	PB531	6
16		VS71 ♂Exh. VS76 ♂Int. Out VS134 ♂Int. In.	R17 ♂Exh. R15 ♂Int.	†L7	L371	C564	3½	4$\frac{1}{16}$	2¼	3-⅛	P185	1.0937	2$\frac{11}{16}$	F	PB531	6
17		VS71	R17 ♂Exh. R15 ♂Int.	†L7	L371	C564	3½	4$\frac{1}{16}$	2¼	3-⅛	P185	1.0937	2$\frac{11}{16}$	F	PB531	6
18		VS71	R17 ♂Exh. R15 ♂Int.			†C3	3½	4$\frac{1}{16}$	2	3-$\frac{5}{64}$	P043	1.0937	3$\frac{5}{16}$	O		
19	IS132					†C971	4$\frac{1}{16}$	4⅝	2¼	3-⅛, 1-$\frac{5}{64}$	P971	1.250	3$\frac{1}{16}$	F		
20	IS145	VS414	R149													
21	IS145	VS414	R149	†L605			Aerotype	3¾	4⅝	2$\frac{11}{16}$	3-⅛, 1-$\frac{5}{64}$	P939	1.000	3$\frac{11}{16}$	F	PB729	6
22	IS132															
23	IS136					†C793	3¾	3¾	2	3-⅛, 1-$\frac{5}{64}$	P793	1.125	3$\frac{1}{16}$	F	PB662	6
24	IS121		R6													
25	IS132	VS256	R7			†C695	4	5	2½	4-¾	P695	1.499	3$\frac{13}{16}$	F	PB627	4
26	IS130	VS236	R6			†C795	4⅛	5	2½	4-¾	P795	1.500	3$\frac{1}{16}$	F	PB627	4
27	IS165	VS246	R7			†C604	3⅜	3⅞	1⅞	4-$\frac{5}{64}$	P604	1.125	2$\frac{13}{16}$	F	PB621	6
28	IS145	VS242	R7			†C721	3¾	4⅜	2⅛	4-$\frac{5}{64}$	P721	1.375	3	F	PB589	6
29	IS165	VS106	R7			†C272	3¾	4½	2$\frac{1}{16}$	4-$\frac{5}{64}$	P079	1.0625	3$\frac{5}{16}$	S	PB515	4

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Hu-In Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	HUG TRUCK	1926-28	K, C80, 88, 3T	Buda KTU	4	S110	V110	G197	G197
2	HUPMOBILE	1938	E-822, ES-822	Own	6	S809	V810		
3	HUPMOBILE	1934-36	417, 421, 518, 618	Own	6	S809	V810		G376
4	HUPMOBILE	1934	427T	Own	8	S506	V507		G254
5	HUPMOBILE	1933	K, 321, K321A	Own	6	S809	V810	G375	G376
6	HUPMOBILE	1932	226, 326	Own	8	S506	V507	G254	G254
7	HUPMOBILE	1932	222	Own	8	S578	V579		
8	HUPMOBILE	1932	216	Own	6	S352	V352	G248	G248
9	HUPMOBILE	1931-32	L8, 218	Own	8	S543	V544	G311	G312
10	HUPMOBILE	1930-32	H, U, 225, 227	Own	8	S524	V525	G254	G254
11	HUPMOBILE	1931-32	Century Six, S2, 214	Own	6	S352	V352	G248	G248
12	HUPMOBILE	1930-32	C, 221	Own	8	S506	V507	G254	G254
13	HUPMOBILE	1930	Century Six, S	Own	6	S352	V352	G248	G248
14	HUPMOBILE	1928-29	Century Eight, M	Own	8	S314	V390	G249	G249
15	HUPMOBILE	1928-29	A6	Own	6	S352	V352	G248	G248
16	HUPMOBILE	1927	E2 after Mtr. No. 2500	Own	8	S314	V390	G249	G249
17	HUPMOBILE	1925-27	A1 to A5	Own	6	S352	V352	G248	G248
18	HUPMOBILE	1926	E2 to Mtr. No. 2500	Own	8	S314	V315	G249	G249
19	HUPMOBILE	1925	E1	Own	8	S314	V315	G249	G249
20	HUPMOBILE	1923-25	R	Own	4	S77	V77	G158	G158
21	HUPMOBILE	1918-23	R	Own	4	S76	V76		
22	INDIAN MTRCYC.	1926-29	Scout, 45 Cu. In. Motor	Own	2	S298	V299		
23	INDIAN MTRCYC.	1920-28	Standard and Chief	Own	2	S245	V246		
24	INDIAN MTRCYC.	1924-28	Prince	Own	2	S284	V284		
25	INDIANA TRUCK	1937-38	80, 84, 1-½T	Herc. OOB	4	S701 卐AS772	V702	G386	G386
26	INDIANA TRUCK	1935-38	45DR, 18X6, 4½-6T	Herc. RXC	6	S659	V659	G267	G266
27	INDIANA TRUCK	1933-38	85, 85DR, 86, 86T, 87, 1½, 2T	Herc. JXB	6	S701 卐AS772	V702	G386	G386
28	INDIANA TRUCK	1932-38	12X4, 95, 95DR, 95SW-75, 95SBT-151, 105, 1½, 3T	Herc. JXC	6	S701 卐AS772	V702	G386	G386
29	INDIANA TRUCK	1932-37	17A, 17ADR, 17ASW-151, 16X4, 106DR, 106SW-151, 2½, 3T	Herc. WXC	6	S624 卐AS970	V625	G267	G267
30	INDIANA TRUCK	1932-38	18X4, 17, 17DR, 17SBT-251, 17SW-251, 19DR, 2½, 4T 22DR, 16X6	Herc. YXC	6	S619 ♂Drilled Stem S659	V619 V659	G267	G266
31	INDIANA TRUCK	1933-34	14X4, 2½T	Herc. WXB	6	S624 卐AS970	V625	G267	G267
32	INDIANA TRUCK	1933-34	16X4, 3T	Herc. WXC2	6	S624 卐AS970	V625	G267	G267
33	INDIANA TRUCK	1933-34	18X4A, 3½T	Herc. YXC3 Slotted Stem	6	S619 ♂Drilled Stem S659	V619 V659	G267	G266

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS132	VS256	R7			†C425	4	5	2 1/2	4-1/4	P326	1.0625	3 5/8	S	PB515	4
2															PB633	12
3	IS131		R38												PB633	12
4			R38												PB633	16
5	IS131	VS332	R38		†L540		3 3/8	4	2 1/16	4-1/8	P756	.874	3	S	PB633	12
6	IS131	VS258 ♂ Outer In. VS259	R38												PB633	16
7	IS100	VS292 ♂ Outer In. VS293	R38	*Save your Customer or the Delivery boy suggesting the other parts he*							*another trip by may need.*				PB666	16
8	IS131	VS260	R36		†L540		3 3/8	4	2 5/16	4-1/8	P756	.874	3	S	PB633	12
9	IS100	VS292 ♂ Outer In. VS293	R38	L522			2 7/8	3 5/16	1 15/32	2-1/8, 1-3/32	P797	.750	2 5/8	S	PB666	16
10	IS107	VS258 ♂ Outer In. VS259	R38								P861	.941	2 1/16	F	PB638	16
11	IS131	VS260	R36		†L509		3 1/4	4 1/16	2 1/4	4-1/8	P756	.874	3	S		
12	IS101	VS258 ♂ Outer In. VS259	R38			C706	3	3 11/16	2 1/16	2-1/8, 1-3/16	P706	.874	2 3/4	S	PB633	16
13	IS131	VS260	R36			†C582	3 1/4	3 1/4	1 11/16	2-1/8, 1-3/16	P582	.9845	2 1/16	S	PB632	12
14	IS100	VS117	R96			†C592	3	3 1/4	1 3/4	2-1/8, 1-3/16	P592	.875	2 3/4	S	PB572	8
15	IS131	VS165	R36			†C582	3 1/4	3 1/4	1 11/16	2-1/8, 1-3/16	P582	.9845	2 1/16	S	PB570	6
16	IS100	VS172	R96			†C520	3	3 1/8	1 13/32	2-1/8, 1-3/16	P233	.750	2 5/8	O		
17	IS131	VS165	R36			†C436	3 1/8	3 1/8	1 13/32	2-1/8, 1-3/16	P284	.865	2 11/16	O		
18	IS100	VS105	R96			†C520	3	3 1/8	1 13/32	2-1/8, 1-3/16	P233	.750	2 5/8	O		
19	IS100	VS105	R96			†C379	2 7/8	3 1/32	1 13/32	2-1/8, 1-3/16	P233	.750	2 5/8	O		
20		VS138				C565	3 1/4	4 3/32	2 13/32	3-1/8	P044	.865	2 1/16	O		
21		VS138				†C103	3 1/4	3 7/16	2	3-3/16	P044	.865	2 1/16	O		
22																
23																
24																
25	IS106	VS353	R126	†L563 Aerotype			3 3/4	4 1/8	2 1/8	3-1/8, 1-3/16	P813	1.000	3 5/8	O		
						C813(B)	3 3/4	4 1/8	2 1/8	3-1/8, 1-3/16	P813	1.000	3 5/8	O		
26	IS130	VS334	R146								P818	1.250	4 3/16	O		
27	IS131	VS353	R126	†L562 Aerotype			3 5/8	4 3/16	2 3/16	3-1/8, 1-3/16	P845	1.000	3 13/32	O		
						C845(B)	3 5/8	4 3/8	2 3/16	3-1/8, 1-3/16	P845	1.000	3 13/32	O		
28	IS131	VS353	R126	†L563 Aerotype			3 3/4	4 1/8	2 1/8	3-1/8, 1-3/16	P813	1.000	3 5/8	O		
						C813(B)	3 3/4	4 1/8	2 1/8	3-1/8, 1-3/16	P813	1.000	3 5/8	O		
29	IS109	VS334	R146	†L571 Aerotype			4	4 3/8	2 3/16	3-1/8, 1-3/16	P785	1.125	3 5/8	O		
				♂ Use with Rod Number 18890CSY												
						†C785(B)	4	4 3/16	2 3/16	4-3/16	P785	1.125	3 5/8	O		
						♂ Use with Rod Number 18790CSY										
30	IS130	VS334	R146			†C786(B)	4 3/8	4 3/8	2 3/16	4-3/16	P786	1.250	3 1/2	O	PB672	12
31	IS109	VS334	R146			†C784(B)	3 3/4	4 3/16	2 3/16	4-3/16	P784	1.125	3 5/8	O		
32	IS109	VS334	R146			†C811(B)	4 1/8	4 3/16	2 3/16	4-3/16	P785	1.125	3 5/8	O		
33	IS130	VS334	R146			†C818(B)	4 5/8	4 3/8	2 3/16	4-3/16	P818	1.250	4 3/16	O		

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

In-In Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	INDIANA TRUCK	1932	170, 195, 3, 3½, 4T	Cont. 20R	6	S639 ♂⅜" Stem S673 ♂$\frac{11}{32}$" Stem	V639 V674	G313 ♂$\frac{11}{32}$" I. D.	G314
2	INDIANA TRUCK	1932	64, 89, 1, 1½T	Cont. 16C	6	S641	V344	G225	G225
3	INDIANA TRUCK	1932	120, 140, 141, 2, 2½, 3T	Cont. 16R	6	S639 ♂⅜" Stem S673 ♂$\frac{11}{32}$" Stem	V639 V674	G313 ♂$\frac{11}{32}$" I. D.	G314
4	INDIANA TRUCK	1932	175, 220, 250, 3, 5, 7½T	Cont. 21R	6	S673	V674	G313	G314
5	INDIANA TRUCK	1931-37	43DR, 20X4, 4-6½T	Herc. RXB	6	S659	V659	G267	G266
6	INDIANA TRUCK	1930-32	400, 615, 615A, 2, 2½T	Wisc. Y	6	S255	V255	G328	G328
7	INDIANA TRUCK	1929-32	127AW, 3T	Herc. K	4	S600	V600	G414	G414
8	INDIANA TRUCK	1928-32	11, 111, 115A, 11X, 111X, 1¼, 1½, 2T	Herc. OX ⅛" O. S. Head for S199	4	S199 S680	V199	G266	G266
9	INDIANA TRUCK	1926-32	25, 26, 41, 127, 2½, 3, 5T	Herc. L	4	S600	V600	G414	G414
10	INDIANA TRUCK	1929-30	641-7, 5½T	Wisc. Z	6	S644	V644		
11	INDIANA TRUCK	1927-29	41, 5T	Herc. G	4	S600	V600	G414	G414
12	INDIANA TRUCK	1927-28	611, 6111, 1¼, 1½T	Cont. 12C	6	S641	V344	G225	G225
13	INDIANA TRUCK	1925-27	36, 40, 3½, 4T	Wauk. DU ⅛" O. S. Head for S126 S126 with ½" Stem	4	S126 卐AS730 S660 S711	V126	G210	G209
14	INDIANA BUS	1932	17B, 90B, 15-17 Pass.	Cont. 27B	6	S641	V344		
15	INDIANA BUS	1932	170B, 195B, 25-29 Pass.	Cont. 33B	6	S639 ♂⅜" Stem S673 ♂$\frac{11}{32}$" Stem	V639 V674	G313 ♂$\frac{11}{32}$" I. D.	G314
16	INTERNATIONAL	1937-38	D2, ½T; D15, ¾-1T	Own HD213	6	S787 卐AS911	V788	G342	G343
17	INTERNATIONAL	1937-38	D30, DS30, D186T, DS186T, 1½T	Own HD232	6	S787 卐AS911	V788	G342	G343
18	INTERNATIONAL	1937-38	D35, DS35, D35B, DS35B, D216T, 1½-2T	Own FAB241	6	S720 卐AS761	V987	G377	G377
19	INTERNATIONAL	1937-38	D40, 2-3T	Own FAB259	6	S720 卐AS761	V987	G377	G377
20	INTERNATIONAL	1937-38	D50, 3-4T	Own FBB298	6	S657 AS733 卐AS770	V658	G322	G322
21	INTERNATIONAL	1937-38	D60, DR60, DR346T, D346F, 3½-5T	Own FBB361	6	S997	V998	G479	G479
22	INTERNATIONAL	1937-38	DR70, 4-6T	Own FBB401	6	S997	V998	G479	G479
23	INTERNATIONAL	1937	D300, DS300, 1½-2T	Own HD232	6	S787 卐AS911	V788	G342	G343
24	INTERNATIONAL	1936-38	C5, D5, ½T	Own FC132	4	S960	V961	G458	G458
25	INTERNATIONAL	1936-37	C12, C15, ¾-1T	Own HD3	6	S787 卐AS911	V788	G342	G343
26	INTERNATIONAL	1935-38	A5, A6, C55, C60, C55F, C55T, C60T, D246F, D246T, 3½-5T	Own FBB3	6	S657 AS733 卐AS770	V658	G322	G322
27	INTERNATIONAL	1935-37	C1, C30, CS30, C300, ½, 1½T	Own HD3 Double Groove	6	S715 ♂Single Groove S787 卐AS911	V716 V788	G342	G343

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS							PISTON PINS				PIN BUSHINGS	
				STOCK NO.			SPECIFICATIONS									
				Alloy	Strut	Iron	Diam.	Lgth.	Comp.	Rings Used	Stock No.	Diam.	Lgth.	Type	Stock No.	No. Used
1	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C714	4 1/16	4 11/16	2 7/8	3-3/16, 1-1/4	P709	1.250	3 1/16	F	PB617	6
						†C822	4 1/16	5 1/16	2 7/8	2-3/16, 1-5/16, 1-1/4	P709	1.250	3 1/16	F	PB617	6
2	IS165	VS231	R12		†L389	C596	3 5/8	3 11/16	2 1/16	3-1/8, 1-3/32	P594	.859	2 7/8	F	PB600	6
3	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C709	4	4 13/16	2 13/16	3-3/16, 1-1/4	P709	1.250	3 1/16	F	PB617	6
						†C821	4	5 1/16	2 13/16	1-3/16, 2-3/16, 1-1/4	P709	1.250	3 1/16	F	PB617	6
4	IS130 In. ☞	VS221 VS283				†C776	4 5/16	4 11/16	2 3/4	3-3/16, 1-1/4	P776	1.250	3 1/16	F	PB617	6
						†C823	4 5/16	5 1/16	2 3/4	1-3/16, 2-3/16, 1-1/4	P776	1.250	3 1/16	F	PB617	6
5	IS130	VS334	R146	†L604 ☜ Aerotype			4 1/2	4 7/8	2 1/16	3-1/8, 1-3/32	P786	1.250	3 11/16	O		
6	IS165	VS277	R87			†C366	3 5/8	4	2	3-3/16	P255	1.0625	2 11/16	WK	PB563	6
7	IS153	VS203	R89			†C680 (B)	4 1/4	5 1/4	2 1/2	4-3/16	P680	1.500	3 3/4	O		
8	IS111	VS205	R14			†C313 (B)	4	4 7/8	2 1/16	3-1/4	P040	1.375	3 1/2	O	PB586	8
9	IS153	VS203	R89			†C681 (B)	4 1/2	5 1/4	2 1/2	4-3/16	P681	1.500	4	O		
10	IS140	VS396 ♂ Outer VS397				†C431	4 1/2	4 3/4	2 3/4	4-3/16	P722	1.187	3 3/16	WK	PB520	6
	In. ☞															
11	IS153	VS203	R89			†C682 (B)	4 3/4	5 1/4	2 1/2	4-3/16	P682	1.500	4 1/4	O		
12	IS165	VS231	R12			†C479	3 1/4	3 3/4	2 1/16	3-3/16	P282	1.000	2 11/16	S	PB558	6
					L433		3 1/4	3 3/4	2 1/16	3-1/8, 1-3/32	P518	1.000	2 3/4	F	PB558	6
13	IS121					†C136 (B)	4 1/2	5 7/8	3 3/8	3-1/4	P723	1.375	3 7/8	O		
14	IS165	VS231	R12		L389	†C596	3 5/8	3 11/16	2 1/16	3-1/8, 1-3/32	P594	.859	2 7/8	F	PB600	6
15	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C714	4 1/16	4 11/16	2 7/8	3-3/16, 1-1/4	P709	1.250	3 1/16	F	PB617	6
						†C822	4 1/16	5 1/16	2 7/8	2-3/16, 1-5/16, 1-1/4	P709	1.250	3 1/16	F	PB617	6
16	IS146	VS286	R100			†C824	3 15/16	3 11/16	2 1/4	3-3/16, 1-3/32	P824	.9375	2 7/8	F	PB698	6
17	IS146	VS286	R100			†C964	3 15/16	3 11/16	2 1/16	3-3/16, 1-3/32	P824	.9375	2 7/8	F	PB727	6
18	IS103	VS339	R101			†C970	3 5/8	3 1/2	2 3/16	3-3/16, 1-1/4	P838	.919	2 11/16	F	PB718	6
				Sleeve Assembly SA43												
19	IS103	VS339	R101			†C963	3 1/2	3 1/2	2 3/16	3-1/8, 1-1/4	P838	.919	2 11/16	F	PB718	6
				Sleeve Assembly SA40												
20	IS110	VS307 ♂ Outer VS306	R148	†L560 ☜ Aerotype			3 3/4	4 1/16	2 5/8	3-1/8, 1-3/32	P870	1.109	3 1/16	F	PB688	6
	In. ☞			Sleeve Assembly SA11												
				L628 ☜ Aerotype			3 3/4	4 3/4	2 11/16	3-1/8, 1-3/32	P870	1.109	3 1/16	F	PB688	6
				♂ For 5000 ft. Altitude Sleeve Assembly for 5000 ft. Altitude SA41												
21	IS106	VS425	R100	†L632 ☜ Aerotype			4 1/16	4 13/16	2 13/16	3-3/16, 1-3/32	P969	1.109	3 11/16	F	PB755	6
22	IS106	VS425	R100	†L634 ☜ Aerotype			4 1/16	4 1/2	2 1/16	3-3/16, 1-3/32	P969	1.109	3 11/16	F	PB755	6
23	IS146	VS286	R100			†C964	3 15/16	3 11/16	2 1/16	3-3/16, 1-3/32	P824	.9375	2 7/8	F	PB698	6
24		VS405	R153			†C943	3 1/4	3 11/16	1 3/4	2-3/16, 1-1/16	P943	.875	2 11/16	F	PB751	4
25	IS146	VS286	R100			†C824	3 15/16	3 11/16	2 1/4	3-3/16, 1-3/32	P824	.9375	2 7/8	F	PB727	6
26	IS110	VS307 ♂ Outer VS306 ♂ Inner	R148	†L560 ☜ Aerotype			3 3/4	4 1/16	2 5/8	3-3/16, 1-3/32	P870	1.109	3 1/16	F	PB688	6
				Sleeve Assembly SA11												
				L628 ☜ Aerotype			3 3/4	4 3/4	2 11/16	3-3/16, 1-3/32	P870	1.109	3 1/16	F	PB688	6
				♂ For 5000 ft. Altitude Sleeve Assembly for 5000 ft. Altitude SA41												
27	IS146	VS286	R93 R100			†C824	3 15/16	3 11/16	2 1/4	3-3/16, 1-3/32	P824	.9375	2 7/8	F	PB727	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

In-Je Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	INTERNATIONAL	1933-37	B4, C35, CS35, C35T, CS35T, C35B, CS35B, C40, C40F, C40T, CS40T, 1½-3T	Own FAB3	6	S720 卐AS761	V721	G377	G377
2	INTERNATIONAL	1933-34	D1, ½T	Own HD	6	S715 ♂Single Groove S787 卐AS911	V716 V788	G342	G343
				Double Groove*					
3	INTERNATIONAL	1933-34	B3, 1½T	FAB2	6	S720 卐AS761	V721	G377	G377
4	INTERNATIONAL	1932-37	A7, 5-7½T	Own FDB	6	AS737	V738	G390	G390
5	INTERNATIONAL	1932-38	A8, 5-7½T	Own FEB	6	AS737	V738	G390	G390
6	INTERNATIONAL	1932-34	AL3	Lyc. 4SLH	6	S318 卐AS855	V319	G168	G168
7	INTERNATIONAL	1930-37	A4, A5, A6, C50, CS50, C50F, C50T, CS50T, 2-4T	Own FBB	6	S657 AS733 卐AS770	V658	G322	G322
8	INTERNATIONAL	1930-37	A1, A2, B2, M2, C10, C20, M3	Wauk. XAH	4	S290	V290	G368	G369
9	INTERNATIONAL	1930-34	HS54, HS54C, W1, W2, 2½T	H. S. 151	4	S655 S656	S655 S656	G161	G162
				1/8" O. S. Head for S655*					
10	INTERNATIONAL	1928-34	A3, A3½, 1½T	Lyc. SAH	6	S318 卐AS855	V319	G168	G168
11	INTERNATIONAL	1929-32	SD, 6 Speed, AW1, AW2, ¾, 1T	Wauk. XA	4	S290	V290	G368	G369
12	INTERNATIONAL	1928-33	S26, SF36, SF46, SL36, SD36, SD46, 1-2T; 15B Bus after Mtr. No. 26996	Lyc. 4SL	6	S318 卐AS855	V319	G168	G168
13	INTERNATIONAL	1927-30	S24, SL24, SL34 (After Mtr. 33810) 1¼, 2T	Lyc. CTK	4	S375	V375	G166	G166
14	INTERNATIONAL	1927-29	6 Speed Special	Wauk. X	4	S290	V290	G368	G369
15	INTERNATIONAL	1928	SF, SL, SD, (To Mtr. 33810) 1¼, 2T	Lyc. CT	4	S326 ♂Nar. Gr. 11/32" from end S375 S51	V326 V375 V51	G166	G166
				Wide Gr. 11/32" from end*				end	
				Wide Gr. 11/32" from end*					
16	INTERNATIONAL	1927	SLC, 36	Lyc. 4H	6	S318 卐AS855	V319	G168	G168
17	INTERNATIONAL	1926-28	S26, SF36, SF46, SL36, SD36, SD46, 1-2T; 15B Bus to Mtr. No. 26996	Lyc. 4SL	6	S318 卐AS855	V319	G168	G168
18	INTERNATIONAL	1924-28	33, 43, 1½-2T	Own	4	S171 ♂Narrow Groove S258 ♂Wide Groove	V171 V258	G214	G214
19	INTERNATIONAL	1920-28	101, 102, 103, 63, 3-5T	Own	4	S172 ♂Narrow Groove S259 S681	V172 V259	G214	G214
				Wide Groove*					
				1/8" O. S. Hd. for S259*					
20	INTERNATIONAL	1921-27	S60, ¾, 1T	Lyc. K	4	S4	V4		
21	INTERNATIONAL	1919-23	21, 31, 41, 1, 2T	Own	4	S171 ♂Narrow Groove S258	V171 V258	G214	G214
				Wide Groove*					
22	INTERNATIONAL	1918-20	61, 3T	Own	4	S172 ♂Narrow Groove S259 S681	V172 V259	G214	G214
				Wide Groove*					
				1/8" O. S. Head for S259*					
23	JEWETT	1926	6-45	Cont. 19L	6	S355	V356	G184	G184

*Indicates 1/32" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS							PISTON PINS				PIN BUSHINGS	
				STOCK NO.			SPECIFICATIONS									
				Alloy	Strut	Iron	Diam.	Lgth.	Comp.	Rings Used	Stock No.	Diam.	Lgth.	Type	Stock No.	No. Used
1	IS103	VS339	R101			†C838	3 7/16	3 13/32	2 11/32	3-1/8, 1-3/16	P838	.919	2 11/32	F	PB718	6
				Sleeve Assembly SA9												
						C893	3 7/16	3 13/32	2 11/32	3-1/8, 1-3/16	P838	.919	2 11/32	F	PB718	6
						♂ For 5000 ft. Altitude										
				Sleeve Assembly for 5000 ft. Altitude SA25												
2	IS146	VS286	R93			†C824	3 1/16	3 1/16	2 1/4	3-3/32, 1-3/16	P824	.9375	2 7/8	F	PB698	6
			R100													
3	IS103	VS339	R101			†C837	3 1/16	3 5/8	2 11/32	3-1/8, 1-3/16	P837	.919	2 11/32	F	PB718	6
				Sleeve Assembly SA8												
4	IS121	VS409 ♂ Outer In. ☞ VS410	R147			†C953	4 1/2	5 13/32	3 3/32	3-3/32, 1-3/16	P856	1.500	3 13/32	F	PB728	6
						C856	4 1/2	6 3/32	3 3/32	3-3/32, 1-3/16	P856	1.500	3 13/32	F	PB728	6
						♂ For 5000 ft. Altitude										
5	IS121	VS409 ♂ Outer In. ☞ VS410	R147			†C857	5	5 1/2	3	3-3/32, 1-3/16	P857	1.500	4 1/16	F	PB728	6
6	IS103	VS33	R1		†L595		3 1/4	3 13/16	2 7/16	2-1/8, 2-3/16	P613	.875	2 25/32	O		
						C739(B)	3 1/4	4	2 7/16	3-1/8, 1-3/16	P613	.875	2 25/32	O	PB527	12
7	IS110	VS307 ♂ Outer VS306 ♂ Inner	R148			†C759	3 5/8	3 13/16	2 1/16	3-1/8, 1-3/16	P759	1.109	3 1/16	F	PB659	6
				Sleeve Assembly SA10												
						C894	3 5/8	4 1/32	2 11/32	3-1/8, 1-3/16	P759	1.109	3 1/16	F	PB659	6
						♂ For 5000 ft. Altitude										
				Sleeve Assembly for 5000 ft. Altitude SA26												
8	IS104	VS343	R28			†C759	3 5/8	3 13/16	2 1/16	3-1/8, 1-3/16	P759	1.109	3 1/16	F	PB688	4
9	IS119	VS239 ♂ Outer VS240 ♂ Inner		†L490 ☞ Aerotype			4 1/4	5 1/16	2 5/8	5-1/8, 1-3/16	P304	1.250	3 13/16	F	PB611	4
				♂ EP8—Aluminum pin Retainer.												
10	IS103	VS33	R1		†L595		3 1/4	3 13/16	2 7/16	2-1/8, 2-3/16	P613	.875	2 25/32	O		
						C739(B)	3 1/4	4	2 7/16	3-1/8, 1-3/16	P613	.875	2 25/32	O	PB527	12
11	IS104	VS343	R28			†C640(B)	3 1/8	3 13/16	2 1/16	3-3/16	P719	.740	3 1/16	O		
12	IS103	VS33	R1		†L595		3 1/4	3 13/16	2 7/16	2-1/8, 2-3/16	P613	.875	2 25/32	O		
						C739(B)	3 1/4	4	2 7/16	3-1/8, 1-3/16	P613	.875	2 25/32	O	PB527	12
13		VS47	R26			†C588	3 3/4	4 5/8	2 5/8	3-1/8, 1-3/16	P588	1.125	3 7/16	S	PB610	4
14	IS104	VS343	R28			†C640(B)	3 1/8	3 13/16	2 1/16	3-3/16	P719	.740	3 1/16	O		
15	IS113	VS47	R26			†C281	3 3/4	4 1/8	2 1/8	4-1/8	P292	1.125	3 1/16	O		
16	IS103	VS33	R1	L361			3 1/4	3 5/16	1 15/16	2-1/8, 1-3/16	P273	.875	2 25/32	O		
17	IS103	VS33	R1			†C584	3 1/4	4	2 7/16	3-1/8, 1-3/16	P79	.875	3	S	PB590	6
18		VS273				†C729	3 3/4	4 1/2	2 1/16	4-3/16	P729	1.299	3 5/8	S	PB542	4
				Sleeve Assembly SA16												
			R29			C960	3 3/4	4 13/32	2 11/32	4-3/16	P729	1.299	3 5/8	S	PB542	4
						♂ For 5000 ft. Altitude										
				Sleeve Assembly for 5000 ft. Altitude SA37												
19		VS65				†C257	4 1/4	5 3/4	2 11/32	4-1/4	P349	1.299	3 11/32	S	PB541	4
				Sleeve Assembly SA14												
			R29			C959	4 1/4	6 3/32	3 3/32	4-1/4	P349	1.299	3 11/32	S	PB541	4
						♂ For 5000 ft. Altitude										
				Sleeve Assembly for 5000 ft. Altitude SA36												
20		VS248	R44			†C104	3 1/2	4	2	3-3/16	P019	.875	3 7/32	S		
21			R29			†C255	3 1/2	5 1/16	2 1/16	3-1/4	P534	1.299	3 1/16	S	PB542	4
22		VS65	R29			†C256	4	6 1/16	3 1/16	4-1/4	P535	1.299	3 11/32	S	PB541	4
23	IS102	VS156	R12			C472	2 7/8	3 3/32	1 31/32	2-1/8, 1-3/16	P701	.734	2 13/32	F	PB552	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Je-Ki Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	JEWETT	1926	6-40, New Day	Cont. SP	6	S355	V356	G184	G184
2	JEWETT	1923-25	23-25, 6-55	Own	6	S73	V73	G251	G251
3	JEWETT	1924	42,000 and up	Own	6	S73	V73	G252	G252
4	JOHN DEERE TRACTOR	1934-38	General Purpose B	Own	2	S930	V931	G444	G444
5	JOHN DEERE TRACTOR	1933-38	General Purpose A	Own	2	S928	V929	G420	G420
6	JOHN DEERE TRACTOR	1931-35	Gen. Purpose Std. Tread after Ser. 226400, Wide Tread after Ser. 403961	Own	2	S753	S753	G359	G359
7	JOHN DEERE TRACTOR	1931-35	D15-27 after Serial 109944	Own	2	S726	S726	G394	G394
8	JOHN DEERE TRACTOR	1928-31	D15-27 after Mtr. No. 53388	Own	2	S269	S269	G360	G360
9	JOHN DEERE TRACTOR	1929-30	Gen. Purpose 10-20 to No. 223802, Wide Tread to No. 402039	Own	2	S753	S753	G359	G359
10	JOHN DEERE TRACTOR	1925-27	D15-27 to Mtr. No. 53388	Own	2	S269	S269	G360	G360
11	JOHN DEERE COMBINE	1930-34	No. 5, No. 5A, No. 15, 10-12 Cut	Lyc. AFE	4			G168	G168
12	JOHN DEERE COMBINE	1928-35	No. 1, 8-10-12 Cut, No. 2, 3, 17, 12-16 Cut	Herc. OX ⅛" O. S. Hd. for S199	4	S199 S680	V199	G266	G266
13	JORDAN	1930	Speedway, Z	Cont. 12K	8	S447	V448	G265	G265
14	JORDAN	1930	70U, 80	Cont. 17S	8	S432	V433	G258	G258
15	JORDAN	1929-30	6E	Cont. 16C	6	S641	V344	G225	G225
16	JORDAN	1929-30	JE, JJ, 8G, 90	Cont. 14S	8	S432	V433	G258	G258
17	JORDAN	1928	RE	Cont. 16E	6	S391	V392	G229	G229
18	JORDAN	1927	RE	Cont. 12E	6	S391	V392	G229	G229
19	JORDAN	1925-27	8J, Line 8	Cont. 8S Taper Grooved Stem	8	S338 ♂ Grooved Stem S432	V339 V433	G270	G270
20	JORDAN	1924-26	A, GL8, Serial 60001 and up	Cont. Sp.	8	S322	V323	G225	G225
21	KELLY SPRINGFIELD TRUCK	1927-28	KS35	Herc. L	4	S600	V600	G414	G414
22	KELLY SPRINGFIELD TRUCK	1927-28	KS25	Herc. K	4	S600	V600	G414	G414
23	KELLY SPRINGFIELD TRUCK	1928	KS15, KS20	Herc. OX ⅛" O. S. Head for S199	4	S199 S680	V199	G266	G266
24	KELLY SPRINGFIELD TRUCK	1926-27	KS35	Cont. L4 Taper Grooved Stem	4	S101 ♂ Grooved Stem S608	V101 V608	G193	G193
25	KELLY SPRINGFIELD TRUCK	1924-27	KS70, KS25	Cont. K4	4	S107	V107	G193	G193
26	KELLY SPRINGFIELD TRUCK	1924-25	K75, K76	Cont. L5 Taper Grooved Stem	4	S101 ♂ Grooved Stem S608	V101 V608	G193	G193
27	KISSEL	1930	126	Lyc. MD	8	S318 卐AS855	V319	G168	G168
28	KISSEL	1930	6-73, 8-95	Lyc. WR-GR	6-8	S379	V380	G168	G168
29	KISSEL	1928	6-70, 8-80	Own	6-8				
30	KISSEL	1925-26	75	Lyc. 2H	8	S318 卐AS855	V319	G168	G168
31	KISSEL	1923-25	8-90	Own	8				

*Indicates ½" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS							PISTON PINS				PIN BUSHINGS	
				STOCK NO.			SPECIFICATIONS									
				Alloy	Strut	Iron	Diam.	Lgth.	Comp.	Rings Used	Stock No.	Diam.	Lgth.	Type	Stock No.	No. Used
1		VS156	R12	L387	†L367	C457	2¾ 2¾	3⅝ 3⅜	1⅛ 1⅛	2-1/16, 1-1/32 3-3/32	P319 P279	.734 .734	2⅝ 2⅛	F S	PB552 PB552	6 6
2		VS178	R69	Bevel Head		†C534	3¼	3⅛	2⅛	3-3/16	P253	1.000	2¾	O		
3		VS178	R69	Bevel Head		†C569	3¼	3⅛	2⅛	3-3/16	P0114	1.000	2⅛	S	PB530	6
4		VS390	R100			†C922	4¼	5⅝	3¼	4-3/16	P922	1.234	3⅛	F	PB741	2
5	IS132	VS389	R142			†C921	5½	7½	4⅜	5-¼	P921	1.609	5	S	PB740	2
6		VS356				†C896	6	8	4¾	5-¼	P896	1.749	5½	S	PB722	2
7		VS355	R141			†C750	6¾	8⅛	4⅛	5-¼	P750	1.750	6⅛	S	PB599	2
8		VS355	R140			†C750	6¾	8⅛	4⅛	5-¼	P750	1.750	6⅛	S	PB599	2
9		VS356				†C855	5¾	7	3⅝	5-3/16	P855	1.749	5¼	S	PB722	2
10		VS355	R140			†C749	6½	8½	4⅜	5-1/16	P750	1.750	6⅛	S	PB599	2
11		VS33	R2			†C858	3¾	4½	2½	4-3/16	P858	.875	3 7/16	O		
12	IS111	VS205	R14			†C313(B)	4	4⅞	2 1/16	3-¼	P040	1.375	3½	O	PB586	8
13	IS105	VS115	R13		†L389	C596	3⅝	3⅛	2 1/16	3-1/16, 1-3/32	P594	.859	2⅞	F	PB600	8
14	IS102	VS202			†L472		2⅞	3⅝	2⅛	3-1/16, 1-1/32	P615	.859	2⅛	F	PB634	8
15	IS165	VS231	R12		†L389	C596	3⅝	3⅛	2 1/16	3-1/16, 1-3/32	P594	.859	2⅞	F	PB600	6
16	IS102 In. VS250	VS101			†L399		3	3⅝	2⅛	3-1/16, 1-1/32	P615	.859	2⅛	F	PB634	8
17	IS135	VS231	R12		†L389	C596	3⅝	3⅛	2 1/16	3-1/16, 1-3/32	P594	.859	2⅞	F	PB600	6
18	IS135	VS231	R12		†L372		3¼	3⅛	2 1/16	3-1/16, 1-3/32	P578	.859	2¾	F	PB600	6
19	IS102	VS101 ♂ Outer In. VS60				†C437	2⅞	3⅝	2⅛	3-3/16	P293	.860	2⅝	S	PB634	8
20		VS115	R34			†C367	3	3¾	2¼	3-3/16	P254	.860	2 1/16	S		
21	IS153	VS203	R89			†C681(B)	4½	5¼	2½	4-3/16	P681	1.500	4	O		
22	IS153	VS203	R89			†C680(B)	4¼	5¼	2½	4-3/16	P680	1.500	3¾	O		
23	IS111	VS205	R14			†C313(B)	4	4⅞	2 1/16	3-¼	P040	1.375	3½	O	PB586	8
24	IS140	VS67	R90 R91			†C158	4½	5⅛	3⅝	4-¼	P149	1.375	4	S	PB580	4
25	IS137	VS73	R90			†C218	4⅛	5 7/16	3⅝	4-¼	P148	1.250	3⅛	S	PB579	4
26		VS67	R90 R91			†C587	4¼	6¼	3⅛	4-¼	P623	1.375	3⅛	S		
27	IS103	VS33	R1		†L397		3¼	3⅛	2 7/16	2-1/16, 2-3/16	P613	.875	2⅛	O		
28	IS102	VS83	R2		†L465		2⅞	3¾	2 1/16	3-1/16, 1-3/16	P612	.875	2⅝	O		
29					†L392		2⅞	3½	1⅛	2-1/16, 1-3/16	P233	.750	2⅝	O		
30	IS103	VS33	R1			†C500 †C478	3⅛ 3⅛	3½ 3½	1⅞ 1⅛	4-1/16 4-1/16	P244 P307	.750 .875	2¾ 2⅞	O S	PB551	8
31				†L302			3 3/16	3½	1⅛	3-1/16	P244	.750	2¾	O		

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Kl-La Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	KLEIBER TRUCK	1934-37	80, 81, 100, 1½, 3½T	Herc. JXB	6	S701 卐AS772	V702	G386	G386
2	KLEIBER TRUCK	1933-37	120, 140, 2½-5½T	Cont. E601	6	S775	V776		
3	KLEIBER TRUCK	1933	120, 2½-4½T	Cont. E600	6	S775	V776		
4	KLEIBER TRUCK	1932-37	120, 140, 121, 2½-7T	Cont. 18R	6	S639 ♂⅝ Stem 45° Seat S673 S1015 S1016 卐AS1017	V639 V674 V776 V1018	G313	G314 ♂$\frac{11}{16}$" I. D.
			Single Groove $\frac{1}{16}$" Stem 45° Seat☞ Single Groove $\frac{1}{16}$" Stem 60° Seat☞ Double Groove $\frac{1}{16}$" Stem 60° Seat☞ Aerotype for S1016☞						
5	KLEIBER TRUCK	1932-34	210, 280, 3½-7½T	Cont. 20R	6	S639 ♂⅝" Stem 45° Seat S673 S1015 S1016 卐AS1017	V639 V674 V776 V1018	G313	G314 ♂$\frac{11}{16}$" I. D.
			Single Groove $\frac{1}{16}$" Stem 45° Seat☞ Single Groove $\frac{1}{16}$" Stem 60° Seat☞ Double Groove $\frac{1}{16}$" Stem 60° Seat☞ Aerotype for S1016☞						
6	KLEIBER TRUCK	1930-37	225, 260, 340, 210, 141, 5-10T	Cont. 21R	6	S639 ♂⅝" Stem 45° Seat S673 S1015 S1016 卐AS1017	V639 V674 V776 V1018	G313	G314 ♂$\frac{11}{16}$" I. D.
			Single Groove $\frac{1}{16}$" Stem 45° Seat☞ Single Groove $\frac{1}{16}$" Stem 60° Seat☞ Double Groove $\frac{1}{16}$" Stem 60° Seat☞ Aerotype for S1016☞						
7	KLEIBER TRUCK	1932-34	100, 2, 3½T	Cont. 16C	6	S641	V344	G225	G225
8	KLEIBER TRUCK	1931-33	51, 80, 1½T	Cont. 18E	6	S391	V392	G229	G229
9	KLEIBER TRUCK	1929-31	657, 4T	Buda BA6	6	S661	V220	G253	G253
10	KLEIBER TRUCK	1929-31	Special 3T	Buda BUS	6	S205	V220	G253	G253
11	KLEIBER TRUCK	1925-29	Special 5T	Cont. B5	4	S129	V129	G193	G193
12	LAFAYETTE	1938	3810	Own	6	S598	V599 3¾" long☞	G339 G482	G409 ♂$\frac{31}{32}$" long
13	LAFAYETTE	1937	37-10	Own	6	S598	V599	G339	G409
14	LAFAYETTE	1934-36	10, 35-10, 36-10	Own	6	S598	V599	G339	G339
15	LA FRANCE REPUBLIC TRK.	1935-38	C3, D4, E4, 2-4T	Wauk. BK	6	S780 卐AS914	V781	G421	G421
16	LA FRANCE REPUBLIC TRK.	1934-38	F4, H6, 3½-5T	Wauk. MK	6	S612 ♂1⅞" Head S712	V612	G413	G413
				1⅞" Head☞					
17	LA FRANCE REPUBLIC TRK.	1934	H5, 4, 5T	Wauk. MZ	6	S712	V612	G413	G413
18	LA FRANCE REPUBLIC TRK.	1932-38	M4, 35-4, 6-8T	Wauk. 6-125	6	AS740	V969		
19	LA FRANCE REPUBLIC TRK.	1931-38	M2, M3, K1, 5-6T	Wauk. SRL	6	S676 卐AS754	V677	G330	G331
20	LA FRANCE REPUBLIC TRK.	1931-34	E2, F2, F3, 2½, 3½T	Lyc. ASD	6	S703	V704	G406	G406
21	LA FRANCE REPUBLIC TRK.	1932-33	H2, H4, 4, 5T	Lyc. TS	6	S601	V602	G166	G166
22	LA FRANCE REPUBLIC TRK.	1932	C1, D1, 1¼, 1½, 2T	Lyc. 4SL	6	S318 卐AS855	V319	G168	G168
23	LA FRANCE REPUBLIC TRK.	1931-32	35-2, 5½T	Wauk. 6AB	6	S126 卐AS730 S660	V126	G210	G209
				⅛" O. S. Head for S126☞					
24	LA SALLE	1937-38	37-50, 38-50	Own	8	S946	V947	G411	G411
25	LA SALLE	1936	36-50	Own	8	S879	V863	G381	G381
26	LA SALLE	1935	35-50	Own	8	S877	V863	G381	G381
27	LA SALLE	1934	350	Own	8	S820	V821	G381	G381

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐=Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS131	VS353	R126			†C845(B)	3⅝	4⅜	2 1/16	3-⅛, 1-1/16	P845	1.000	3 1/32	O		
				L562 Aerotype			3⅝	4 1/16	2 1/16	3-⅛, 1-1/16	P845	1.000	3 1/32	O		
2	IS132	VS221				†C981	3⅞	5 1/16	3 1/16	3-1/16, 1-¼	P980	1.250	3 1/64	F		
3	IS132	VS221				†C980	3 11/16	5 1/16	3 1/16	3-1/16, 1-¼	P980	1.250	3 1/64	F		
4	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13 R159			†C709	4	4 3/32	2 3/32	3-1/16, 1-¼	P709	1.250	3 1/32	F	PB617	6
						†C821	4	5 3/32	2 3/32	1-1/16, 2-1/32, 1-¼	P709	1.250	3 1/32	F	PB617	6
5	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13 R159			†C714	4⅛	4 1/16	2⅞	3-1/16, 1-¼	P709	1.250	3 1/32	F	PB617	6
						†C822	4⅛	5 1/16	2⅞	2-1/16, 1-1/32, 1-¼	P709	1.250	3 1/32	F	PB617	6
6	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13 R159			†C776	4⅜	4 1/16	2¾	3-1/16, 1-¼	P776	1.250	3 1/32	F	PB617	6
						†C823	4⅜	5 1/16	2¾	1-1/16, 2-1/32, 1-¼	P776	1.250	3 1/32	F	PB617	6
7	IS165	VS231	R12		†L389	C596	3⅝	3 1/16	2 1/16	3-⅛, 1-3/32	P594	.859	2⅞	F	PB600	6
8	IS135	VS231	R12		†L389	C596	3⅝	3 1/16	2 1/16	3-⅛, 1-3/32	P594	.859	2⅞	F	PB600	6
9	IS130	VS236	R6			†C795	4⅛	5	2½	4-¼	P795	1.500	3 1/16	F	PB627	6
10	IS130	VS236	R6			†C695	4	5	2½	4-¼	P695	1.500	3 1/16	F	PB627	6
11	IS156	VS70	R90			†C271	4¾	6⅛	3½	4-¼	P150	1.500	4¼	S	PB578	4
12	IS147	VS400	R44		†L611		3⅝	3⅞	2 1/16	2-⅛, 2-3/32	P774	.875	2 1/16	F	PB715	6
13	IS147	VS400	R44		†L611		3⅝	3⅞	2 1/16	2-⅛, 2-3/32	P774	.875	2 1/16	F	PB715	6
14	IS147	VS316	R44		†L487		3¼	3⅞	2 1/16	3-⅛, 1-1/16	P039	.875	2 3/32	F	PB715	6
15	IS145	VS414	R149	†L605 Aerotype			3¾	4⅜	2 1/32	3-⅛, 1-1/16	P939	1.000	3 1/32	F	PB729	6
16		VS359	R28	†L570 Aerotype			4⅛	4½	2 1/32	3-⅛, 1-1/16	P878	1.000	3 3/32	AP	PB729	6
						C808(B)	4⅛	4½	2 1/32	3-⅛, 1-1/16	P677	1.000	3⅝	O		
17	IS136	VS359	R28								P677	1.000	3⅝	O		
18	IS132			†L620 Aerotype			4⅜	5 1/16	2 1/32	3-⅛, 1-1/16	P947	1.375	4¼	AP	PB730	6
19	IS106	VS373	R28			†C782(B)	4⅜	4⅝	2 1/32	3-⅛, 1-1/16	P760	1.000	3⅞	O	PB529	12
				†L620 Aerotype			4⅜	5 1/16	2 1/32	3-⅛, 1-1/16	P947	1.375	4¼	AP	PB730	6
20	IS132					†C859	3¾	4¼	2½	2-⅛, 2-1/16	P790	1.000	3 1/32	F		
21	IS114					†C679	3⅞	4⅝	2⅜	4-1/16	P679	1.125	3 1/16	S	PB562	6
22	IS135	VS33	R1		†L397		3¼	3 1/16	2 1/16	2-⅛, 2-1/16	P613	.875	2 3/32	O		
						C739(B)	3¼	4	2 1/16	3-⅛, 1-1/16	P613	.875	2 3/32	O	PB527	12
23	IS121					†C723	4½	5	2 3/32	3-⅛, 1-1/16	P723	1.375	3⅞	O		
24		VS369	R101	†L573 Cam Ground Type L593 Same as L573 except relieved for round grinding.			3⅝	4⅛	2 1/32	2-⅛, 2-1/32	P882	.874	2 1/16	F	PB749	8
25	IS101	VS350	R101	†L546 ♂ Cam ground type but has milled relief and may be round ground.			3	3 1/16	2⅛	3-⅛, 1-3/32	P849	.8555	2 3/32	S	PB725	8
26	IS101	VS350	R101	†L557 ♂ Cam ground type but has cast relief and may be round ground.			3	3 1/16	2⅛	3-⅛, 1-3/32	P849	.8555	2 3/32	S	PB670	8
27	IS145	VS336	R101	†L546 ♂ Cam ground type but has milled relief and may be round ground.			3	3 1/16	2⅛	3-⅛, 1-3/32	P849	.8555	2 3/32	S	PB670	8

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

La-Ly

Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	LA SALLE	1932-33	345B, 345C	Own	8	S558	V559	G320	G320
2	LA SALLE	1931	345	Own	8	S386 AS857	V387	G271	G271
3	LA SALLE	1930	340 after Eng. No. 6-10764	Own	8	S386 AS857	V387	G271	G271
4	LA SALLE	1930	340 to Eng. No. 6-10764	Own	8	S494	V495	G271	G271
5	LA SALLE	1929	328	Own	8	S386 AS857	V387	G271	G271
6	LA SALLE	1928	303 after No. 213,000	Own	8	S386 AS857	V387	G271	G271
7	LA SALLE	1927	303 to No. 213,000	Own	8	S386 AS857	V387	G271	G271
8	LAWSON TRAC.	1925-26	12-25	Mid. 402	4	S266	V267		
9	LAWSON TRAC.	1920-23	15-30	Beav. JA	4	S119	S119		
10	LE ROI MOTOR		WW3	Own	4	S953	V953	G461	G461
11	LE ROI MOTOR		K, KP, 2677	Own	4	S212	V212	G370	G370
12	LE ROI MOTOR		W, WP, WCP, WRP, Y, YP, YCR, YRP	Own	2-4				
13	LE ROI MOTOR		2C, CR, 2577, CM, M, MH, MP, MR, S, SH, SP, SR, R, RH, RP, RR	Own	1-2-4	S212	V212	G370	G370
14	LE ROI MOTOR		RX, RXC, RXS	Own	4-6	S646	S646		
15	LE ROI MOTOR		RX-1, RX-1S	Own	4-6	S646	S646		
16	LINCOLN	1936	Zephyr	Own	12	S950 卐AS899	V950	G950S	G950S
17	LINCOLN	1932-33	3¼" Bore	Own	12	S807	V808	G192	G192
18	LINCOLN	1928-32	After Prod. No. 46889	Own	8	S89	V435	G192	G192
19	LINCOLN	1927-28	After Prod. No. 45569	Own	8	S434	V435	G192	G192
20	LINCOLN	1920-27	All	Own	8	S89	V89	G192	G192
21	LOCOMOBILE	1928-29	8-80, 8-88	Lyc. 4MD	8	S318 卐AS855	V319	G168	G168
22	LOCOMOBILE	1925-28	Jr. 8	Own	8	S335	V335		
23	LOCOMOBILE	1927	8-80	Lyc. Sp.	8	S318 卐AS855	V319	G168	G168
24	LYCOMING MTR.	1935-36	AEF, ASE	Own	6-8	S774	V704	G406	G406
25	LYCOMING MTR.	1927-29	GT	Own	8	S379	V380	G168	G168
26	LYCOMING MTR.	1930-34	WR, GR, WRGM, WRP	Own	6-8	S379	V380	G168	G168
27	LYCOMING MTR.	1927-30	WS, GS	Own	6-8	S379	V380	G168	G168
28	LYCOMING MTR.	1931-32	GU	Own	8	S379	V545	G168	G168
29	LYCOMING MTR.	1934-36	WF, GF	Own	6-8	S822	V832	G168	G379
30	LYCOMING MTR.	1925-27	2H, 2S	Own	6-8	S318 卐AS855	V319	G168	G168
31	LYCOMING MTR.	1928-32	4SL, 4SG, after Mtr. No. 26996	Own	6-8	S318 卐AS855	V319	G168	G168
32	LYCOMING MTR.	1928	4SL, 4SG, to Mtr. No. 26996	Own	6	S318 卐AS855	V319	G168	G168
33	LYCOMING MTR.	1927-32	4MD, FDA	Own	6-8	S318 卐AS855	V319	G168	G168

*Indicates $\frac{1}{32}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS126	VS184	R9			†C769	3⅜	3 3/32	1 13/32	2-3/16, 1-1/8, 1-3/32	P663	.874	3 1/32	S	PB699	8
2	IS126	VS184	R9			†C692	3⅜	3⅜	1½	2-1/8, 2-3/16	P663	.874	3 1/32	S	PB597	8
3	IS126	VS184	R9			†C691	3 1/16	3⅜	1½	2-1/8, 2-3/16	P663	.874	3 1/32	S	PB597	8
4		VS184	R9			†C691	3 1/16	3⅜	1½	2-1/8, 2-3/16	P663	.874	3 1/32	S	PB597	8
5	IS126	VS184	R9			†C663	3¼	3 11/32	1 15/32	3-3/16	P663	.874	3 1/32	S	PB597	8
6	IS126	VS184	R9			†C577	3⅛	3 1/32	1 15/32	3-3/16	P583	.875	2 7/8	S	PB598	8
7	IS126	VS184	R9			†C503	3⅛	3 1/32	1 11/32	3-3/16	P323	.749	2 11/16	S	PB547	8
					L439		3⅛	3⅜	2	3-1/8, 1-3/16	P323	.749	2 11/16	S	PB547	8
8						†C908(B)	4⅛	5⅛	2¼	3-¼	P785	1.125	3 5/8	O		
9																
10	IS102		R144			†C985	2¾	2 13/32	1¾	3-3/16	P985	.750	2 1/16	S	PB761	4
11		VS394	R144			†C985	2¾	2 13/32	1¾	3-3/16	P985	.750	2 1/16	S	PB761	4
12						†C985	2¾	2 13/32	1¾	3-3/16	P985	.750	2 1/16	S	PB671	2-4
13		VS394	R144			†C232	3⅛	3 1/32	1½	3-3/16	P143	.750	2 1/4	S	PB587	1-2-4
14	IS129					†C909	6½	8 5/16	4 5/16	3-5/16	P909	1.750	6 3/32	F	PB738	4
						†C910	6½	8 5/16	4 1/16	4-3/16	P909	1.750	6 3/32	F	PB738	4
15	IS129					†C911	6¾	8 5/16	4	4-3/16	P911	1.750	6 11/32	F	PB738	4
16	IS131	VS327	R118													
17		VS323														
18	IS114	VS324	R109	†L454			3½	3¾	2	3-1/8	P664	.875	3 1/4	S	PB581	8
				†L542			3½	3¾	2	4-1/8	P664	.875	3 1/4	S	PB581	8
				♂Cam ground type but has cast relief and may be round ground.												
19	IS134	VS274	R109	†L454			3½	3¾	2	3-1/8	P664	.875	3 1/4	S	PB581	8
				†L542			3½	3¾	2	4-1/8	P664	.875	3 1/4	S	PB581	8
				♂Cam ground type but has cast relief and may be round ground.												
20	IS114	VS218	R109	†L122			3⅜	3¾	2	3-1/8	P0122	.875	3 1/8	S	PB581	8
21	IS103	VS33	R1		†L397		3¼	3 11/32	2 1/16	2-1/8, 2-3/16	P613	.875	2 11/32	O		
						C739(B)	3¼	4	2 1/16	3-1/8, 1-3/16	P613	.875	2 11/32	O	PB527	12
22	Out. ~~2⅜~~ VS48 In. ~~2⅜~~ VS197					†C522	2 13/16	3	1 13/32	3-1/8, 1-3/16	P290	.750	2 1/16	F	PB548	8
23	IS103	VS33	R1	L361			3¼	3¾	1 13/16	2-1/8, 1-3/16	P273	.875	2 11/32	O		
24																
25	IS102	VS83	R2		†L417		2¾	3⅜	1 13/16	2-1/8, 1-3/16	P359	.875	2¼	O		
						C575	2¾	3½	1 13/16	4-1/8	P359	.875	2¼	O		
26	IS102	VS83	R2		†L465	C874	2⅞	3¾	2 1/16	3-1/8, 1-3/16	P612	.875	2⅜	O		
27	IS102	VS83	R2		†L396		2⅞	3½	1 13/16	2-1/8, 1-3/16	P612	.875	2⅜	O		
						†C578(B)	2⅞	3½	1 13/16	4-1/8	P612	.875	2⅜	O		
28	IS102	VS315	R2		†L491		3	3¾	2 1/16	3-1/8, 1-3/16	P730	.875	2½	O		
29	IS102	VS83	R101		†L539		3 1/16	3¾	2 1/16	3-1/8, 1-3/16	P730	.875	2½	O		
30	IS103	VS33	R1			†C478	3⅛	3½	1 13/16	4-1/8	P307	.875	2⅞	S	PB551	6-8
						†C500	3⅛	3½	1⅞	4-1/8	P244	.750	2¾	O		
31	IS103	VS33	R1		†L397		3¼	3 11/32	2 1/16	2-1/8, 2-3/16	P613	.875	2 11/32	O		
					†L595	Same as L397 except solid skirt.										
						C739(B)	3¼	4	2 1/16	3-1/8, 1-3/16	P613	.875	2 11/32	O	PB527	12
32	IS103	VS33	R1			†C584	3¼	4	2 1/16	3-1/8, 1-3/16	P79	.875	3	S	PB590	6
33	IS103	VS33	R1		†L397		3¼	3 11/32	2 1/16	2-1/8, 2-3/16	P613	.875	2 11/32	O		
						C739(B)	3¼	4	2 1/16	3-1/8, 1-3/16	P613	.875	2 11/32	O	PB527	12-16

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Ly-Ma Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES Exhaust	VALVES Intake	VALVE GUIDES Exh.	VALVE GUIDES Int.
1	LYCOMING MTR.	1927-29	4HM, 4SM	Own	6-8	S318 卐AS855	V319	G168	G168
2	LYCOMING MTR.	1927	4H	Own	6-8	S318 卐AS855	V319	G168	G168
3	LYCOMING MTR.	1925-27	4S, 4SM, 4HM	Own	6-8	S318 卐AS855	V319	G168	G168
4	LYCOMING MTR.	1915-27	K	Own	4	S4	V4		
5	LYCOMING MTR.	1925	CH	Own	4	S326 ♂Narrow Groove 11/32" from end S375 S51	V326 V375 V51	G166	G166
				Wide Groove 11/32" from end*					
				Wide Groove 13/32" from end*					
6	LYCOMING MTR.	1931-34	ASA, ASB	Own	6	S703	V704	G406	G406
7	LYCOMING MTR.	1927-30	TF	Own	6	S601 ♂Narrow Groove S745	V602 V746	G166	G166
				Wide Groove*					
8	LYCOMING MTR.	1923-27	CF	Own	4	S326 ♂Narrow Groove 11/32" from end S375 S51	V326 V375 V51	G166	G166
				Wide Groove 11/32" from end*					
				Wide Groove 13/32" from end*					
9	LYCOMING MTR.	1922-27	CE	Own	4	S326 ♂Narrow Groove 11/32" from end S375 S51	V326 V375 V51	G166	G166
				Wide Groove 11/32" from end*					
				Wide Groove 13/32" from end*					
10	LYCOMING MTR.	1930-35	AFD, AFE	Own	4				
11	LYCOMING MTR.	1931-36	ASD	Own	6	S703	V704	G406	G406
12	LYCOMING MTR.	1932-34	AEC, AED	Own	8	S703	V704		
13	LYCOMING MTR.	1927-30	CTK, CT after No. 33810	Own	4	S375	V375	G166	G166
14	LYCOMING MTR.	1924-29	CT to No. 33810	Own	4	S326 ♂Narrow Groove 11/32" from end S375 S51	V326 V375 V51	G166	G166
				Wide Groove 11/32" from end*					
				Wide Groove 13/32" from end*					
15	LYCOMING MTR.	1928-32	TS	Own	6	S601 ♂Narrow Groove S745	V602 V746	G166	G166
				Wide Groove*					
16	LYCOMING MTR.	1923-30	C	Own	4	S326 ♂Narrow Groove 11/32" from end S375 S51	V326 V375 V51	G166	G166
				Wide Groove 11/32" from end*					
				Wide Groove 13/32" from end*					
17	MACCAR TRUCK	1932-34	36A, 40A, 2½, 4T	Buda H298	6	S696	V697	G396	G397
18	MACCAR TRUCK	1933	100, 1½, 2T	Buda H260	6	S696	V697	G396	G397
19	MACCAR TRUCK	1933	66A, 4, 6T	Herc. YXC3	6	S619 ♂Drilled Stem S659	V619 V659	G267	G266
				Slotted Stem*					
20	MACCAR TRUCK	1929-33	60A, 4, 6T	Buda BA6	6	S661	V220	G253	G253
21	MACCAR TRUCK	1932	56, 3T	Buda DW6	6	S610	V610	G236	G236
22	MACCAR TRUCK	1927-29	36, 1¼, 1½T	Buda HS6	6	S640	V640	G240	G240
23	MACCAR TRUCK	1926-28	66, 3T	Buda BUS	6	S205	V220	G253	G253
24	MACCAR TRUCK	1924-26	EX, 1¼T	Wisc. SU	4	S234 ♂Short Stem S120	V234 V120	G328	G328
				Long Stem*					
25	MACK JR. TRUCK	1936-38	1MA, 10MA, 10MB, 10MX, 2M6A, 2M6AS, 10MF, 11M, 2M6B, 2M6BS, ½-1½T	Own MR209	6	S792	V793	G412	G412
26	MACK JR. TRUCK	1936-38	20MA, 20MB, 20MX, 21M, 21MT, 1½-2T	Own MR228	6	S891	V891	G402	G402
27	MACK JR. TRUCK	1936-38	30MA, 30MB, 30MX, 30MTA, 30MTX, 31M, 31MS, 31MDR, 31MT, 2-3T; 90MA, 90MX, 90MTA, 90MTX, Bus.	Own MR268	6	S831 卐AS1002	V831	G224	G224

*Indicates 1/32" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS103	VS33	R1			†C561	3 1/4	3 1/2	1 11/16	4-1/8	P307	.875	2 7/8	S	PB551	6-8
2	IS103	VS33	R1	L361			3 1/4	3 3/4	1 11/16	2-1/8, 1-3/16	P273	.875	2 31/32	O		
3	IS103	VS33	R1			†C451	3 1/4	3 1/2	1 11/16	3-3/16	P307	.875	2 7/8	S	PB551	6-8
				L360			3 1/4	3 3/4	1 11/16	2-1/8, 1-3/16	P307	.875	2 7/8	S	PB551	6-8
4		VS248	R44	L19		†C104	3 1/2	4	2	3-3/16	P019	.875	3 7/32	S		
5	IS113	VS47	R26 R26			†C427	3 1/2	4 1/8	2 1/8	4-1/8	P157	1.125	2 7/8	F	PB631	4
6	IS113		R26			†C783 (B)	3 5/8	4 1/4	2 1/2	2-1/8, 2-3/16	P783	1.000	3 1/16	O		
7	IS114					†C678	3 5/8	4 3/8	2 3/8	4-3/16	P678	1.125	2 31/32	S	PB562	6
8	IS113	VS47	R26 R26	†L127		C310	3 5/8	4 1/8	2 1/8	4-1/8	P157	1.125	2 7/8	F	PB631	4
9	IS113	VS47	R26 R26	†L119		C307	3 11/16	4 1/8	2 1/8	4-1/8	P157	1.125	2 7/8	F	PB631	4
10						†C858	3 3/4	4 1/2	2 1/2	4-3/16	P858	.875	3 7/32	O		
11	IS132		R26			†C859	3 3/4	4 1/4	2 1/2	2-1/8, 2-3/16	P790	1.000	3 7/32	F		
12	IS132		R26			†C790	3 3/4	4 7/32	2 3/8	2-1/8, 2-3/16	P790	1.000	3 7/32	F		
13		VS47	R26			†C588	3 3/4	4 5/8	2 5/8	3-1/8, 1-3/16	P588	1.125	3 7/16	S	PB610	4
14	IS113	VS47	R26 R26			†C281	3 3/4	4 1/8	2 1/8	4-1/8	P292	1.125	3 5/16	O		
15	IS114					†C679	3 7/8	4 3/8	2 3/8	4-3/16	P679	1.125	2 31/32	S	PB562	6
16	IS113	VS47	R26 R26			†C461	4	4 7/8	2 1/8	3-3/16	P292	1.125	3 5/16	O		
17	IS136					†C793	3 3/4	3 3/4	2	3-1/8, 1-3/16	P793	1.125	3 7/32	F	PB662	6
18	IS136					†C817	3 1/2	3 3/4	2	3-1/8, 1-3/16	P817	1.125	2 29/32	F	PB662	6
19	IS130	VS234	R146			†C818 (B)	4 5/8	4 7/8	2 5/16	4-3/16	P818	1.250	4 1/16	O		
20	IS130	VS236	R6			†C795	4 1/8	5	2 1/2	4-1/4	P795	1.500	3 5/16	F	PB627	6
21	IS143	VS242	R7			†C721	3 3/4	4 3/8	2 1/8	4-3/16	P721	1.375	3	F	PB589	6
22	IS165	VS246	R7			†C604	3 3/8	3 7/8	1 7/8	4-3/16	P604	1.125	2 13/16	F	PB621	6
23	IS130	VS236	R6			†C387	4	5	2 1/2	4-1/4	P250	1.125	3 3/8	S	PB573	6
24	IS165	VS393				†C296	4	4 1/4	2 1/8	3-3/16	P297	1.0625	3 1/16	WK	PB565	4
25		VS372	R122	†L614			3 1/16	3 1/16	2	3-3/32, 1-1/4	P881	.859	2 31/32	F	PB726	6
				L572			3 1/16	3 1/16	2	2-3/32, 1-3/32, 1-3/16	P881	.859	2 31/32	F	PB726	6
				♂ Cam ground type but has cast relief and may be round ground.												
26		VS309	R101	†L597			3 5/8	4	2 7/32	3-3/32, 1-1/4	P728	.984	2 31/32	F	PB664	12
				L534			3 5/8	4	2 7/32	2-3/32, 1-3/32, 1-3/16	P728	.984	2 31/32	F	PB664	12
				♂ Cam ground type but has cast relief and may be round ground.												
27		VS309	R101	†L597			3 5/8	4	2 7/32	3-3/32, 1-1/4	P728	.984	2 31/32	F	PB664	12
				L534			3 5/8	4	2 7/32	2-3/32, 1-3/32, 1-3/16	P728	.984	2 31/32	F	PB664	12
				♂ Cam ground type but has cast relief and may be round ground.												

(B) = Piston is bushed.
S = Set Screw type piston pin.
† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.
O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Ma-Ma Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES Exhaust	VALVES Intake	VALVE GUIDES Exh.	VALVE GUIDES Int.
1	MACK JR. BUS	1936-38	90MS, 90MSX, 90MTS, 90MTSX,	Own	6	S831 卐AS1002	V831	G224	G224
2	MACK TRUCK	1937-38	EJ	Own EJ	6	S831 卐AS1002	V831	G224	G224
3	MACK TRUCK	1936-38	BF, EB, EQ, 2-4T	Own CU	6	S766	V767	G325	G325
4	MACK TRUCK	1935-38	BM, CH, 3-5½T	Own CE	6	AS651 ♂Flat Seat S981	V652 V982	G324	G324
				60° Seat					
5	MACK TRUCK	1934-38	BX, CJ, FH, 4-15T	Own CF	6	AS651 ♂Flat Seat S981	V652 V982	G324	G324
				60° Seat					
6	MACK TRUCK	1934-35	AB, 3, 5T	Own AB	4	S633 卐AS747	V634	G308	G308
7	MACK TRUCK	1930-35	BL, 1, 2T	Own BL	6	S652 ♂Flat Seat S766	V654 V767	G325	G325
				60° Seat					
8	MACK TRUCK	1929-38	BG, BF, AB6, EH, EC, ER, EM, 1-3T	Own BG	6	S653 ♂Flat Seat S766	V654 V767	G325	G325
				60° Seat					
9	MACK TRUCK	1928-34	BJ, BK, 3, 4T	Own BK	6	S633 卐AS747	V634	G308	G308
10	MACK TRUCK	1928-38	AC, AK, 3½, 5, 6½, 7T	Own AC	4	S613	V614	G235	G235
11	MACK TRUCK	1929-32	BC, 2, 3, 4T	Own	6	AS651 ♂ Flat Seat S981	V652 V982	G324	G324
				60° Seat					
12	MACK TRUCK	1929-30	AC, AK, AP, 3½, 5, 7½T	Own	4	S649 ♂ Flat Seat	V650	G235	G235
13	MACK TRUCK	1928-30	AB, 1, 1½, 2, 2½T	Own	4	S633 卐AS747	V634	G308	G308
14	MACK TRUCK	1922-32	AB, 1, 1½, 2, 2½T	Own	4	S140 ♂Drilled Stem S142	V141 V143	G205	G205
				Slotted Stem					
15	MACK TRUCK	1916-28	AC, 3½, 5, 6½, 7T	Own	4	S144 ♂Drilled Stem S146 S186	V145 V147	G204	G204
				Slotted Stem					
				¼" O. S. Head for S146					
16	MACK TRUCK	1916-28	AB, 1, 1½, 2, 2½T	Own	4	S140 ♂Drilled Stem S142	V141 V143	G205	G205
				Slotted Stem					
17	MACK TRUCK	1922-23	AB, 1, 1½, 2, 2½T	Own	4	S140 ♂Drilled Stem S142	V141 V143	G205	G205
				Slotted Stem					
18	MACK TRUCK	1922-23	AC, 3½, 5, 6½, 7T	Own	4	S144 ♂Drilled Stem S146 S186	V145 V147	G204	G204
				Slotted Stem					
				¼" O. S. Head for S146					
19	MACK BUS	1936-38	CX, CQ, 29-31 Pass.	Own CF	6	AS651 ♂Flat Seat S981	V652 V982	G324	G324
				60° Seat					
20	MACK BUS	1936-37	CW	Own CU	6	S766	V767	G325	G325
21	MACK BUS	1928-34	AB, AL, 25-29 Pass.	Own	4-6	S224 S605	V225	G247	G247
				S224 with 2 1/16" Head					
				Flat Seat		S633 卐AS747	V634	G308	G308
22	MACK BUS	1932	BG, 17-21 Pass., CG, CW	Own BG	6	S653 ♂Flat Seat S766	V654 V767	G325	G325
				60° Seat					
23	MACK BUS	1929-32	BC, 25, 29, 33 Pass.	Own	6	AS651 ♂Flat Seat S981	V652 V982	G324	G324
				60° Seat					

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1		VS309	R101	†L613			3 5/8	4 1/2	2 1/64	3-3/32, 1-1/4	P833	.984	3 9/64	F	PB664	12
				L533			3 5/8	4 1/2	2 1/64	2-3/32, 1-3/32, 1-5/16	P833	.984	3 9/64	F	PB664	12
2	IS144	VS309	R101	†L647			3 1/2	4	2 7/32	3-3/32, 1-1/4	P989	.984	3 1/32	F	PB664	12
3			R113	†L626 ☒ Aerotype			3 7/8	4 5/16	2 1/16	3-1/8, 1-3/8	P958	1.000	3 1/16	AP	PB690	6
4			R108			†C827 (B)	4	5	2 7/8	3-1/8, 1-3/8	P734	1.125	3 3/32	AP	PB678	6
				L501 ☒ Aerotype			4	5 1/32	2 7/8	3-1/8, 1-3/8	P734	1.125	3 3/32	AP	PB678	6
															♂ Rod Bush.	
5	IS123		R108			†C872 (B)	4 1/4	5 11/32	2 7/8	4-3/16	P872	1.125	4 3/16	AP	PB678	6
															♂ Rod Bush.	
6	IS123	VS285	R67			†C828 (B)	4 1/4	5 17/32	3 3/8	3-3/16	P199	1.3125	3 1/16	O		
7	IS122		R113	†L504 ☒ Aerotype			3 1/4	4 5/16	2 1/16	3-1/8, 1-3/16	P738	1.000	3 7/64	AP	PB690	6
8	IS122		R113	†L503 ☒ Aerotype			3 5/8	4 5/16	2 1/16	3-1/8, 1-3/16	P736	1.000	3 1/64	AP	PB690	6
9	IS123	VS285	R67			†C781 (B)	4 1/2	5 17/32	3 1/8	4-3/16	P830	1.312	4 3/32	F		
						†C829 (B)	4 1/2	5 1/32	3 3/64	3-3/16	P199	1.3125	3 1/16	O		
10		VS285	R67			†C646 (B)	5	6 1/16	3 11/16	3-1/4	P0111	1.4375	4 1/32	O		
						♂ Wide land between first and second ring groove										
						C875	5	6 3/4	3 11/16	3-1/4	P0111	1.4375	4 1/32	O		
						♂ Wide Top Land.										
11	IS123	VS86 ♂ Outer In. ☒ VS228	R108	†L501 ☒ Aerotype			4	5 1/32	2 7/8	3-1/8, 1-3/8	P734	1.125	3 3/32	AP	PB678	6
						†C827 (B)	4	5	2 7/8	3-1/8, 1-3/8	P734	1.125	3 3/32	AP	PB678	6
															♂ Rod Bush.	
12		VS285	R67	†L502 ☒ Aerotype			4 5/8	6 5/16	3 11/16	4-3/16	P735	1.4375	4 1/16	O		
13	IS123	VS285	R67			†C673 (B)	4	6	3 3/8	3-3/16	P0110	1.3125	3 5/16	O		
14		VS42	R68			†C241 (B)	4 1/4	6	3 3/8	2-3/16	P199	1.3125	3 1/16	O		
						♂ Wide land between first and second ring groove										
			R67		†L383		4 1/4	5 7/8	3 3/8	3-3/16	P199	1.3125	3 1/16	O		
						C570 (B)	4 1/4	6	3 3/8	4-3/16	P199	1.3125	3 1/16	O		
						†C828 (B)	4 1/4	5 17/32	3 3/8	3-3/16	P199	1.3125	3 1/16	O		
						♂ Wide Top Land.										
15		VS39	R68			†C377 (B)	5	6 1/16	3 11/16	4-1/4	P0111	1.4375	4 1/32	O		
						†C646 (B)	5	6 1/16	3 11/16	3-1/4	P0111	1.4375	4 1/32	O		
			R67			♂ Wide land between first and second ring groove										
						C875	5	6 3/4	3 11/16	3-1/4	P0111	1.4375	4 1/32	O		
						♂ Wide Top Land.										
16		VS42	R68			†C673 (B)	4	6	3 3/8	3-3/16	P0110	1.3125	3 5/16	O		
						♂ Wide land between first and second ring groove										
			R67			C487 (B)	4	5 1/16	3 3/8	4-3/16	P0110	1.3125	3 5/16	O		
17		VS42	R68			†C240	4	6 5/8	4 1/8	2-5/32	P548	1.625	3 1/4	F		
			R67													
18		VS39	R68			†C242	5	7 5/16	4 11/16	2-1/4	P549	1.875	4 7/32	F		
			R67													
19	IS123		R108			†C872 (B)	4 1/4	5 11/32	2 7/8	4-3/16	P872	1.125	4 3/16	AP	PB678	6
															♂ Rod Bush.	
20			R113	†L626 ☒ Aerotype			3 7/8	4 5/16	2 1/16	3-1/8, 1-3/8	P958	1.000	3 1/16	AP	PB690	6
21		VS280	R67			†C241 (B)	4 1/4	6	3 3/8	3-3/16	P199	1.3125	3 1/16	O		
						♂ Wide land between first and second ring groove										
					†L383		4 1/4	5 7/8	3 3/8	3-3/16	P199	1.3125	3 1/16	O		
						C570 (B)	4 1/4	6	3 3/8	4-3/16	P199	1.3125	3 1/16	O		
	IS123					†C828 (B)	4 1/4	5 17/32	3 3/8	3-3/16	P199	1.3125	3 1/16	O		
22	IS122		R113	†L503 ☒ Aerotype			3 5/8	4 5/16	2 1/16	3-1/8, 1-3/16	P736	1.000	3 1/64	AP	PB690	6
23	IS123	VS86 ♂ Outer In. ☒ VS228	R108	†L501 ☒ Aerotype			4	5 1/32	2 7/8	3-1/8, 1-3/8	P734	1.125	3 3/32	AP	PB678	6
						†C827 (B)	4	5	2 7/8	3-1/8, 1-3/8	P734	1.125	3 3/32	AP	PB678	6
															♂ Rod Bush.	

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	MACK BUS	1916-27	AB, 25 Pass.	Own	4	S140 ♂Drilled Stem S142	V141 V143	G205	G205
				Slotted Stem*					
2	MARMON	1930-31	79, Big Eight, 88	Own	8	S522	V523	G257	G257
3	MARMON	1928-31	68, 69, 70	Own	8	S422	V423	G155	G155
4	MARMON	1930	Roosevelt	Own	8	S422	V423	G155	G155
5	MARMON	1929	78	Own	8	S420	V421	G155	G155
6	MARMON	1928	78	Own	8	S420	V421	G156	G156
7	MARMON	1927	Little 8	Own	8	S376	V377	G156	G156
8	MARMON	1927-29	74, 75	Own	6	S42	V41	G243	G243
9	MARMON	1920-26	34B	Own	6	S42	V41	G243	G243
10	MARQUETTE	1930	All	Own	6	S483	V484	G138	G138
11	MASSEY-HARRIS TRACTOR	1936-38	Pacemaker No. 107001 and up; Challenger No. 130001 and up	Own	4	S1032	V1033		
12	MASSEY-HARRIS TRACTOR	1934-38	25 after No. 69000	Own	4	S934	V935	G416	G416
13	MASSEY-HARRIS TRACTOR	1930-36	General Purpose, 15-22	Herc. OOC	4	S701 卐AS772	V702	G386	G386
14	MASSEY-HARRIS TRACTOR	1927-34	20-30, 25 to No. 69000	Wallis	4	S200 S214	V200 V214	G361	G361
				1/8" O. S. Hd. for S-V200*					
15	MASSEY-HARRIS COMBINE		No. 11; 12 Cut	Herc. OOC	4	S701 卐AS772	V702	G386	G386
16	MASSEY-HARRIS COMBINE		9A, 12 Cut after Mtr. 162000	Buda WTU	4	S111	V111	G198	G198
17	MASSEY-HARRIS COMBINE		9A, 12 Cut to Mtr. 162000	Buda WTU	4	S111	V111	G198	G198
18	MASSEY-HARRIS COMBINE		7, 9, 9B, 12-15 Cut	Cont. S4	4	S263	V263		
19	MAXWELL	1915-24	All	Own	4	S43	V43	G180	G179
20	MAXWELL	1925	All	Own	4	S72	V72	G106	G107
21	McCORMICK-DEERING TRAC.	1934-38	Farmall F12, I12, O12, W12, Fairway 12, after Mtr. FS3035	Own	4	S798	V798	G418	G418
22	McCORMICK-DEERING TRAC.	1933-38	TracTracTor T40, TA40, WA40,	Own	6	S657 AS733 卐AS770	V658	G322	G322
23	McCORMICK-DEERING TRAC.	1933-38	Diesel WD40, TD40, PD40	Own	4	S924	V925		
24	McCORMICK-DEERING TRAC.	1931-38	Farmall F30, 20-30, I30, W30	Own	4	S795	V796	G419	G419
25	McCORMICK-DEERING TRAC.	1931-38	Farmall F20	Own	4	S799	V799	G214	G214

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1		VS167 ♂Outer VS228 ♂Inner	R41 R67			C487(B) †C673(B)	4 4	5 15/16 6	3 5/8 3 5/8	4-3/16 3-3/16	P0110 P0110	1.3125 1.3125	3 1/4 3 1/4	O O		
2		VS261	R41													
3		VS167	R41	†L446			2 13/16	3 1/4	1 11/16	2-1/8, 1-3/16	P648	.750	2 1/16	O		
4		VS161	R39	†L457			2 3/4	3 3/32	1 31/32	2-1/8, 1-3/16	P648	.750	2 1/16	O		
5		VS161	R39	†L413			2 11/16	3 1/16	1 11/16	2-1/8, 1-3/16	P701	.734	2 13/32	F	PB576	8
6		VS161	R39	†L413			2 11/16	3 1/16	1 11/16	2-1/8, 1-3/16	P701	.734	2 13/32	F	PB576	8
7		VS161	R39	†L319	†L369		2 3/4	3 1/4	1 11/16	2-1/8, 1-3/16	P319	.734	2 5/8	F	PB576	8
8	Out. ☞VS25 In. ☞VS84		R40								P617	1.187	3 1/16	S	PB518	6
9	Out. ☞VS25 In. ☞VS84		R40			†C449	3 3/4	4 11/16	2 1/16	4-3/16	P201	1.187	3 1/4	F	PB518	6
10		VS175	R49			†C676	3 1/8	3 13/16	2 1/4	2-1/8, 1-3/16	P676	.8125	2 11/16	O	PB624	6
11			R100													
12		VS395	R145			†C752 Sleeve Assembly SA24	4 3/8	4 11/16	2 1/16	3-1/4	P752	1.249	3 23/32	O		
13	IS106	VS353	R126			†C844(B)	4	4 1/16	2 1/8	3-1/8, 1-3/16	P677	1.000	3 5/8	O		
14	IS132	VS360	R145			†C752 Sleeve Assembly SA24	4 3/8	4 11/16	2 1/16	3-1/4	P752	1.249	3 23/32	O		
15	IS106	VS353	R126			†C844(B)	4	4 1/16	2 1/8	3-1/8, 1-3/16	P677	1.000	3 5/8	O		
16	IS165	VS106	R7			†C927	3 3/4	4 1/2	2 1/16	4-3/16	P721	1.375	3	F	PB589	4
17	IS165	VS106	R7			†C272	3 3/4	4 1/2	2 1/16	4-3/16	P079	1.0625	3 1/32	S	PB515	4
18	IS137	VS198	R34			†C473	4 1/4	4 3/4	2 7/8	3-1/4	P277	1.500	3 15/32	F	PB574	4
						C842	4 1/4	4 3/4	2 7/8	3-3/16, 1-1/4	P277	1.500	3 15/32	F	PB574	4
19		VS135	R12			†C201	3 5/8	3 3/4	1 5/8	3-3/16	P121	.749	3	O		
				L15			3 5/8	3 3/4	1 5/8	3-1/16	P121	.749	3	O		
				Skirt Ring ☞C43(B)			3 5/8	3 1/2	1 5/8	3-1/8	P015	.750	3 1/32	O		
				Skirt Ring ☞C529			3 5/8	3 1/2	1 5/8	3-1/8	P015	.750	3 1/32	O		
20		VS135	R12	†L121			3 5/8	4 1/8	2	3-1/8, 1-5/32	P121	.749	3	O		
						C465	3 5/8	4 1/8	2	3-1/8	P121	.749	3	O		
21	IS158	VS375	R101			†C899 Sleeve Assemby SA27	3	3 31/64	1 53/64	2-1/8, 2-3/16	P899	.919	2 1/2	F	PB731	4
						†C904 Sleeve Assembly SA28	3	3 7/16	1 11/16	4-1/16, 1-3/16	P899	.919	2 1/2	F	PB731	4
						C962 ♂For 5000 ft. Altitude Sleeve Assembly for 5000 ft. Altitude SA39	3	3 13/32	1 27/32	4-1/16, 1-3/16	P899	.919	2 1/2	F	PB731	4
22	IS110	VS307 ♂Outer In. ☞VS306	R148			†C759 Sleeve Assembly SA10	3 5/8	3 11/16	2 1/16	3-1/16, 1-3/16	P759	1.109	3 1/32	F	PB659	6
						C894 ♂For 5000 ft. Altitude Sleeve Assembly for 5000 ft. Altitude SA26	3 5/8	4 1/64	2 15/32	3-1/16, 1-3/16	P759	1.109	3 1/32	F	PB659	6
23																
24		VS426	R150			†C892 Sleeve Assembly SA17	4 1/4	5 3/4	2 11/16	4-3/16	P349	1.299	3 11/16	S	PB541	4
						C959 ♂For 5000 ft. Altitude Sleeve Assembly for 5000 ft. Altitude SA36	4 1/4	6 1/32	3 7/32	4-1/4	P349	1.299	3 11/16	S	PB541	4
25		VS362	R149			†C729 Sleeve Assembly SA16	3 3/4	4 1/2	2 1/16	4-3/16	P729	1.299	3 3/8	S	PB542	4
						C960 ♂For 5000 ft. Altitude Sleeve Assembly for 5000 ft. Altitude SA37	3 3/4	4 33/64	2 13/32	4-3/16	P729	1.299	3 3/8	S	PB542	4

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Mc-Mi Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	McCORMICK-DEERING TRAC.	1931-38	TracTracTor T20	Own	4	S922	V922	G442	G442
							Flange*	♂ Plain G443	G443
2	McCORMICK-DEERING TRAC.	1932-36	22-36, 30, 15-30, Ind. 30	Own	4	S762	V763	G336	G336
3	McCORMICK-DEERING TRAC.	1928-32	15-30, 22-36 after TG99926	Own	4	S626	V626	G336	G336
						♂ Single groove			
				Three Grooves*		S762	V763		
4	McCORMICK-DEERING TRAC.	1923-28	15-30 to TG99926	Own	4	S207	V207	G335	G335
						♂ Narrow Groove			
				Wide Groove*		S265	V265		
				1/8" O. S. Hd. for S265*		S682			
				Three Grooves*		S923	S923		
5	McCORMICK-DEERING TRAC.	1923-36	10-20, Ind. 20	Own	4	S172	V172	G214	G214
						♂ Narrow Groove			
				Wide Groove*		S259	V259		
				1/16" O. S. Hd. for S259*		S681			
				Double Groove*		S797	V797		
6	McCORMICK-DEERING COM.	1934-36	No. 31, 41, 51, Harvester Thresher	Own	6	S787	V788	G342	G343
						卐AS911			
7	McCORMICK-DEERING COM.		No. 7, 10, 11, Harvester Thresher	Own	4	S171	V171	G214	G214
						♂ Narrow Groove			
				Wide Groove*		S258	V258		
				Double Groove*		S799	V799		
8	McCORMICK-DEERING COM.		No. 11, 12-16 Cut; No. 7, Hillside 12-16 Cut	Own	4	S171	V171	G214	G214
						♂ Narrow Groove			
				Wide Groove*		S258	V258		
				Double Groove*		S799	V799		
9	McCORMICK-DEERING COM.		No. 8 Prairie, 10-12 Cut, No. 8 Harvester Thresher	Wauk. XA	4	S290	V290	G368	G369
10	McCORMICK-DEERING COM.	1921-24	No. 2, 3, Harvester Thresher	Own	4	S113	V113		
11	McFARLAN	1926-28	St. 8	Lyc. 4H	8	S318	V319	G168	G168
						卐AS855			
12	MIDWEST MOTOR			Own	4	S264	V264	G353	G353
13	MIDWEST MOTOR		402	Own	4	S266	V267	G354	G354
14	MIDWEST MOTOR		400	Own	4	S163	S163		
15	MIDWEST MOTOR		399	Own	4	S163	S163		
16	MINN. MOLINE		Also See TWIN CITY						
17	MINN. MOLINE	1935-38	21-32 after Eng. 900001; FTA	Own	4	S903	S903	G357	G357
18	MINN. MOLINE	1929-34	21-32 to Eng. 900000	Own	4	S903	S903	G357	G357
19	MINN. MOLINE	1935	Universal, Kombination to Eng. 525400	Own	4	S904	S904	G425	G425
20	MINN. MOLINE	1921-36	20-35, 27-44 With Replacement Head AE2108 or AE2109	Own	4	S902	S902	G356	G356
21	MINN. MOLINE	1927-36	20-35, 27-44 after Eng. 200227	Own	4	S902	S283	G356	G426
22	MINN. MOLINE	1921-26	20-35, 27-44 to Eng. 200226	Own	4	S283	S283	G426	G426
23	MINN. MOLINE	1930-38	KT, MT, 11-20, 12-25, KTA, MTS	Own	4	S904	S904	G425	G425
24	MINN. MOLINE	1930-34	27-42	Own	4	S933	S933	G358	G358
25	MINN. MOLINE	1926-35	17-30B	Own	4	S933	S933	G358	G358
26	MINN. MOLINE	1921-35	17-30A	Own	4	S933	S933	G358	G358

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1		VS381	R150			†C729	3⅝	4½	2 1/16	4-1/16	P729	1.299	3⅝	S	PB542	4
				Sleeve Assembly SA16												
						C960	3⅝	4 3/16	2 3/16	4-1/16	P729	1.299	3⅝	S	PB542	4
				♂For 5000 ft. Altitude												
				Sleeve Assembly for 5000 ft. Altitude SA37												
2	IS127	VS364	R150			†C751	4⅜	5½	2⅞	4-¾	P350	1.484	4⅛	S	PB584	4
				Sleeve Assembly SA13												
						C961	4⅜	5 1/16	3 1/16	4-¾	P350	1.484	4⅛	S	PB584	4
				♂For 5000 ft. Altitude												
				Sleeve Assembly for 5000 ft. Altitude SA38												
3	IS127	VS364	R29			†C751	4⅜	5½	2⅞	4-¾	P350	1.484	4⅛	S	PB584	4
				Sleeve Assembly SA13												
			R150			C961	4⅜	5 1/16	3 1/16	4-¾	P350	1.484	4⅛	S	PB584	4
				♂For 5000 ft. Altitude												
				Sleeve Assembly for 5000 ft. Altitude SA38												
4	IS137	VS364				†C530	4½	5⅝	2⅞	4-¾	P350	1.484	4⅛	S	PB584	4
			R29	Sleeve Assembly SA12												
				Sleeve Assembly to change to 4⅝" bore SA12A												
			R150													
5		VS241				†C257	4¼	5⅝	2 1/16	4-¾	P349	1.299	3 1/16	S	PB541	4
				Sleeve Assembly SA14												
			R29			†C959	4¼	6 1/16	3 1/16	4¾	P349	1.299	3 1/16	S	PB541	4
				♂For 5000 ft. Altitude												
			R149	Sleeve Assembly for 5000 ft. Altitude SA36												
6		VS286	R100			†C824	3 1/16	3 1/16	2¼	3-3/32, 1-1/16	P824	.9375	2⅜	F	PB727	6
7		VS362				†C729	3⅝	4½	2 1/16	4-1/16	P729	1.299	3⅝	S	PB542	4
				Sleeve Assembly SA16												
			R29			C960	3⅝	4 3/16	2 3/16	4-1/16	P729	1.299	3⅝	S	PB542	4
			R149	♂For 5000 ft. Altitude												
				Sleeve Assembly for 5000 ft. Altitude SA37												
8		VS362				†C729	3⅝	4½	2 1/16	4-1/16	P729	1.299	3⅝	S	PB542	4
				Sleeve Assembly SA16												
			R29			C960	3⅝	4 3/16	2 3/16	4-1/16	P729	1.299	3⅝	S	PB542	4
			R149	♂For 5000 ft. Altitude												
				Sleeve Assembly for 5000 ft. Altitude SA37												
9	IS104	VS343	R28			†C640(B)	3½	3 1/16	2 1/16	3-1/16	P719	.740	3 1/16	O		
10		VS241				†C255	3½	5 1/16	2 1/16	3-¾	P534	1.299	3 1/16	S	PB542	4
11	IS103	VS33	R1			†C561	3¼	3½	1 1/16	4-⅛	P307	.875	2⅜	S	PB551	8
12		VS365	R156			C891	4⅝	6⅞	3⅝	4-¾	P891	1.500	4⅜	S	PB736	4
13						†C903(B)	4⅛	5⅛	2¼	3-¼	P785	1.125	3⅝	O		
14						†C214(B)	4½	5⅝	2 1/16	4-¼	P556	1.250	4	O		
15																
16																
17	IS143	VS379	R131			†C897	4⅝	5½	2 1/16	4-¼	P897	1.250	3 1/16	S	PB603	4
18	IS143	VS379	R131			†C535	4½	5½	2 1/16	4-¼	P353	1.250	3 1/16	S	PB603	4
19		VS378	R132			†C517	4¼	5 1/16	2¾	4-¼	P353	1.250	3 1/16	S	PB603	4
				Sleeve Assembly SA20												
20		VS377	R131			†C542	5½	6¾	3½	4-5/16	P355	1.625	5⅛	S	PB744	4
21		VS377	In. R130 Ex. R131			†C542	5½	6¾	3½	4-5/16	P355	1.625	5⅛	S	PB744	4
22		VS377	R130			†C542	5½	6¾	3½	4-5/16	P355	1.625	5⅛	S	PB744	4
23		VS378	R132			†C517	4¼	5 1/16	2¾	4-¼	P353	1.250	3 1/16	S	PB603	4
				Sleeve Assembly SA20												
24	IS140					†C978	4⅞	6 1/16	4 1/16	4-¼	P928	1.500	4⅜	S	PB736	4
				Sleeve Assembly SA45												
25	IS140					†C929	4⅞	6 1/16	3	4-5/16	P928	1.500	4⅜	S	PB736	4
				Sleeve Assembly SA35												
26	IS140					†C928	4¾	6 1/16	3	4-5/16	P928	1.500	4⅜	S	PB736	4
				Sleeve Assembly SA34												

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Mi-Mo Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	MINN. MOLINE	1919-34	12-20, 17-28	Own ⅛" O. S. Hd. for S216	4	S216 S270	V216	G355	G355
2	MINN. MOLINE COMBINE	1929-32	B, 10 Cut; C, 16-20 Cut	Herc. G	4	S600	V600 Flanged	G414 ♂Plain G415	G414 G415
3	MINN. MOLINE COMBINE	1928-32	C	Herc. L	4	S600	V600 Flanged	G414 ♂Plain G415	G414 G415
4	MINN. MOLINE COMBINE		B, 10-12 Cut; D, 10 Cut	Herc. OOC Slotted Stem	4	S735 ♂Drilled Stem S701 卐AS772	V736 V702	G386	G386
5	MINN. MOLINE HARVESTER		12 Cut	Herc. OX ⅛" O. S. Hd. for S199	4	S199 S680	V199	G266	G266
6	MOLINE TRACTOR		Universal	Own ⅛" O. S. Head for S54	4	S54 S242	V54		
7	MONARCH TRAC.	1931	K, 35 after Eng. K2670	Own	4	S698 卐AS999	V698	G352	G352
8	MONARCH TRAC.	1930-31	K, 35 to Eng. K2670	Own	4	S698 卐AS999	V698	G352	G352
9	MONARCH TRAC.	1930-31	H, 50 after Serial 61999	Own	4	S698 卐AS999	V698	G352	G352
10	MONARCH TRAC.	1927-30	50 to Serial 61999	Stearns	4	S645	S645	G366	G366
11	MONARCH TRAC.	1931	75	Le Roi RX1	4	S646	S646		
12	MONARCH TRAC.	1929-30	75, F after Serial 70218	Le Roi RX	4	S646	S646		
13	MONARCH TRAC.	1927-29	75, F to Serial 70218	Le Roi RX	4	S646	S646		
14	MONARCH TRAC.	1923	20-30, 25-40	Beav. JB	4	S119	S119		
15	MOON	1928-29	6-72	Cont. 16E	6	S391	V392	G229	G229
16	MOON	1928	8-80	Cont. 15S	8	S432	V432		
17	MOON	1926-28	6-60	Cont. 26L	6	S357	V358	G184	G184
18	MOON	1924-26	Series A	Cont. 7Z	6	S44	V44	G225	G225
19	MORELAND TRK.	1935-38	R190 R200, 3½-5½T	Herc. JXD	6	S701 卐AS772	V702	G386	G386
20	MORELAND TRK.	1935	T420, 8-10T	Wauk. 6RB ⅛" O.S. Head for S126 S126 with ½" Stem	6	S126 AS730 S660 S711	V126	G210	G209
21	MORELAND TRK.	1935	R125, R140, 2-3½T	Herc. JXB	6	S701 卐AS772	V702	G386	G386
22	MORELAND TRK.	1932-38	RR10, RR12, RA15, RA20, R12H, R13H, R16H, R170, 2-4T	Herc. JXC	6	S701 卐AS772	V702	G386	G386
23	MORELAND TRK.	1932-38	H24, H26, E30H, H30H, H300, HD34M, H340, HC340, HD400, 5½-10T	Herc. RXB	6	S659	V659	G267	G266
24	MORELAND TRK.	1931-38	B16, E16, E16H, E18, E19, E21, E22H, E22, E25H, E250, E220, E260, 3½-7T	Herc. WXC3	6	S624 卐AS970	V625	G267	G267
25	MORELAND TRK.	1928-33	E6, E7, EX6, ED6, B13, B16	Herc. WXC	6	S624 卐AS970	V625	G267	G267
26	MORELAND TRK.	1932	Ace, 1¼T	Cont. 18E	6	S391	V392	G229	G229
27	MORELAND TRK.	1929-32	R16, B6, RR7, 2, 3T	Cont. 16C	6	S641	V344	G225	G225
28	MORELAND TRK.	1929-31	H, HD, 5, 6T	Herc. YXC Slotted Stem	6	S619 ♂Drilled Stem S659	V619 V659	G267	G266
29	MORELAND TRK.	1929-30	SD6, 5½-10T	Herc. YXC2	6	S659	V659	G267	G266
30	MORELAND TRK.	1928-30	RR, BX, 1½, 2T	Cont. 12C	6	S641	V344	G225	G225
31	MORELAND TRK.	1929	ACE, 1¼T	Cont. 34L	6	S357	V358	G184	G184
32	MORELAND TRK.	1929	TD, 6-10T	Cont. 15H	6	S233			

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS							PISTON PINS				PIN BUSHINGS	
				STOCK NO.			SPECIFICATIONS									
				Alloy	Strut	Iron	Diam.	Lgth.	Comp.	Rings Used	Stock No.	Diam.	Lgth.	Type	Stock No.	No. Used
1	IS165	VS374	R129			†C517	4¼	5 1/16	2⅝	4-¼	P353	1.250	3 1/16	S	PB603	4
				Sleeve Assembly SA20												
2	IS153	VS203	R89			†C682(B)	4⅝	5¼	2½	4-3/16	P682	1.500	4¼	O		
3	IS153	VS203	R89			†C681(B)	4½	5¼	2½	4-3/16	P681	1.500	4	O		
4	IS106	VS353	R126			†C844(B)	4	4 1/16	2⅛	3-⅛, 1-3/16	P677	1.000	3⅝	O		
5	IS111	VS205	R14			†C313(B)	4	4⅞	2 5/16	3-¼	P040	1.375	3½	O	PB586	8
6						†C492	3½	4	2	3-3/16	P030	1.000	3 1/16	O		
7	IS140	VS363	R134			†C912	5	6⅝	3⅜	3-3/16, 1-¼	P891	1.500	4⅝	S	PB736	4
				Sleeve Assembly SA31												
8	IS140	VS363	R134			†C891	4¾	6⅞	3⅝	4-¼	P891	1.500	4⅝	S	PB736	4
				Sleeve Assembly SA2												
				Sleeve Assembly to change this motor to 5" bore SA31												
9	IS140	VS363	R134			†C931	5¼	6 7/16	3 1/16	4-¼	P907	1.500	4⅞	S	PB736	4
10						†C930	5⅛	6	3⅜	4-3/16	P930	1.625	4⅝	S	PB745	4
11	IS129					†C911	6¾	8⅜	4	4-5/16	P911	1.750	6 11/32	F	PB738	4
12	IS129					†C910	6½	8⅜	4 1/16	4-5/16	P909	1.750	6 3/32	F	PB738	4
13	IS129					†C909	6½	8⅜	4⅜	3-⅜	P909	1.750	6 3/32	F	PB738	4
14	IS133					†C420(B)	4½	5 1/16	2 1/16	4-¼	P681	1.500	4	O	PB574	8
15	IS135	VS231	R12		†L389	C596	3⅜	3 1/16	2 1/16	3-⅛, 1-3/32	P594	.859	2⅞	F	PB600	6
16	IS102	VS202	R13		†L399		3	3⅝	2⅛	3-⅛, 1-3/16	P615	.859	2 1/32	F	PB634	8
		♂ Outer In. ‡ VS255														
17	IS100	VS251	R12			C472	2⅞	3 3/32	1 31/32	2-⅛, 1-3/16	P701	.734	2 1/32	F	PB552	6
18	IS165	VS20	R12			†C423	3⅛	3¼	1 1/16	3-3/16	P278	.860	2 3/32	S	PB557	6
19	IS131	VS353	R126		†L603	Aerotype	4	4 1/16	2 1/16	3-⅛, 1-5/16	P937	1.000	3½	O		
20	IS121					†C814(B)	5	5⅝	3 1/32	4-3/16	P814	1.375	4 7/16	O		
						♂ Offset Bosses.										
21	IS131	VS353	R126		†L562	Aerotype	3⅝	4 1/16	2 1/16	3-⅛, 1-7/32	P845	1.000	3 3/32	O		
						C845(B)	3⅝	4⅝	2 1/16	3-⅛, 1-3/16	P845	1.000	3 3/32	O		
22	IS131	VS353	R126		†L563	Aerotype	3¾	4⅛	2⅛	3-⅛, 1-3/16	P813	1.000	3⅜	O		
						C813(B)	3¾	4⅛	2⅛	3-⅛, 1-3/16	P813	1.000	3⅜	O		
23	IS130	VS334	R146		†L604	Aerotype	4½	4⅞	2 1/16	3-⅛, 1-5/16	P786	1.250	3 1/16	O		
24	IS109	VS334	R146			†C920(B)	4¼	4 1/16	2 1/16	4-3/16	P785	1.125	3⅝	O		
25	IS109	VS334				†C785(B)	4	4 1/16	2 1/16	4-3/16	P785	1.125	3⅝	O		
					†L571	Aerotype	4	4⅝	2 1/16	3-⅛, 1-3/16	P785	1.125	3⅝	O		
26	IS135	VS231	R12		†L389	C596	3⅜	3 1/16	2 1/16	3-⅛, 1-5/32	P594	.859	2⅞	F	PB600	6
27	IS165	VS231	R12		†L389	C596	3⅜	3 1/16	2 1/16	3-⅛, 1-5/32	P594	.859	2⅞	F	PB600	6
28	IS130	VS334				†C786(B)	4⅝	4⅞	2 1/16	4-3/16	P786	1.250	3 1/16	O	PB672	12
29	IS130	VS334	R146			†C787(B)	4½	4¾	2 1/16	4-3/16	P786	1.250	3 1/16	O	PB672	12
					†L604	Aerotype	4½	4⅞	2 1/16	3-⅛, 1-5/16	P786	1.250	3 1/16	O		
30	IS165	VS231	R12			†C479	3¼	3¾	2 1/16	3-3/16	P282	1.000	2 1/32	S	PB558	6
					L433		3¼	3¾	2 1/16	3-⅛, 1-5/32	P518	1.000	2¾	F	PB558	6
31	IS100	VS251	R12			C472	2⅞	3 3/32	1 31/32	2-⅛, 1-3/16	P701	.734	2 1/32	F	PB552	6
32	IS137	VS253				†C514	4½	5 1/16	3⅝	4-¼	P299	1.500	3 1/16	S	PB583	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

(6-1-38)

Mo-Na Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	MORELAND TRK.	1927-28	AXX, 2½, 3, 4T	Cont. 6B	6	S287 ♂ Grooved S288	V287 Stem V288	G189	G189
				Taper Grooved Stem*					
2	MORELAND TRK.	1926-27	RX, SX, 5, 6T	Cont. B5	4	S129	V129	G193	G193
3	MORELAND TRK.	1927	RC, 1½, 2T	Cont. 11U	6	S343	V344	G225	G225
4	MORELAND TRK.	1925-26	AC, AX, 3, 3½T	Cont. L4	4	S101 ♂ Grooved S608	V101 Stem V608	G193	G193
				Taper Grooved Stem*					
5	MORELAND TRK.	1922-26	EX, 20B, 2T	Cont. K4	4	S107	V107	G193	G193
6	MORELAND BUS	1922-28	RC, 16 Pass.	Herc. O	4	S199	V199	G266	G266
7	NASH	1938	3820, Ambassador Six	Own	6	S827	V828	G483	G378
8	NASH	1938	3880, Ambassador Eight	Own	8	S829	V1001	G483	G378
9	NASH	1937	37-20	Own	6	S827	V828	G378	G378
10	NASH	1937	37-80	Own	8	S829	V830	G378	G378
11	NASH	1936	3640	Own	6	S598	V599	G339	G409
12	NASH	1935-36	35-80, 36-80, Amb. Adv. 8	Own	8	S829	V830	G378	G378
13	NASH	1935-36	3520, Adv. Six, 3620	Own	6	S827	V828	G378	G378
14	NASH	1934	1220, Big Six	Own	6	S827	V828	G378	G378
15	NASH	1934	1280, Adv. 8	Own	8	S539 ♂ Single S829	V540 Groove V830	G378	G378
				Double Groove*					
16	NASH	1934	1290, AMB. 8	Own	8	S580 ♂ Single S827	V581 Groove V828	G378	G378
				Double Groove*					
17	NASH	1933	1120, Big Six	Own	6	S598	V599	G339	G339
18	NASH	1933	1130, Std. 8	Own	8	S537	V538	G340	G340
19	NASH	1933	1180, ADV. 8	Own	8	S539	V540	G262	G262
20	NASH	1933	1190, AMB. 8	Own	8	S580	V581	G144	G144
21	NASH	1932-33	1070, Std. 8, 1170 Spec. 8	Own	8	S537	V538	G305	G305
22	NASH	1932	1060	Own	6	S501	V502	G261	G261
23	NASH	1932	1080, Spec 8	Own	8	S539	V540	G262	G262
24	NASH	1932	1090, AMB. 8	Own	8	S580	V581	G144	G144
25	NASH	1931-32	6-60, 9-60	Own	6	S501	V502	G261	G261
26	NASH	1931-32	8-70, 9-70	Own	8	S537	V538	G305	G305
27	NASH	1931-32	8-80, 9-80	Own	8	S539	V540	G262	G262

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-33)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS							PISTON PINS				PIN BUSHINGS	
				STOCK NO.			SPECIFICATIONS									
				Alloy	Strut	Iron	Diam.	Lgth.	Comp.	Rings Used	Stock No.	Diam	Lgth.	Type	Stock No.	No. Used
1	IS143	VS92 ♂ Outer VS108 ♂ Inner	R34 R98			†C312	3 5/8	4 1/2	2 5/8	3-1/4	P085	1.125	3 1/16	S	PB532	6
2	IS156	VS70	R90			†C271	4 3/4	6 1/8	3 1/2	4-3/4	P150	1.500	4 1/4	S	PB578	4
3	IS165	VS231	R12			†C479	3 1/4	3 3/4	2 1/16	3-3/16	P282	1.000	2 13/16	S	PB558	6
					L443		3 1/4	3 3/4	2 1/16	3-3/16, 1-3/32	P518	1.000	2 3/4	F	PB558	6
4	IS140	VS67	R90 R91			†C158	4 1/2	5 11/16	3 5/8	4-3/4	P149	1.375	4	S	PB580	4
5	IS137	VS73	R90			†C218	4 1/8	5 7/16	3 3/8	4-3/4	P148	1.250	3 11/16	S	PB579	4
6	IS111	VS205	R14			†C313 (B)	4	4 7/8	2 5/16	3-3/4	P040	1.375	3 1/2	O	PB586	8
7	IS136	VS401 ♂ Outer In. VS402	R100		†L611		3 5/8	3 7/8	2 1/16	2-3/16, 2-3/32	P774	.875	2 13/16	F	PB715	6
8	IS135	VS401 ♂ Outer In. VS402	R100		†L538		3 1/8	3 11/16	2 1/8	3-3/16, 1-1/16	P839	.875	2 1/16	F	PB715	8
9	IS136	VS401 ♂ Outer In. VS402	R100		†L611		3 5/8	3 7/8	2 1/16	2-3/16, 2-3/32	P774	.875	2 13/16	F	PB715	6
10	IS135	VS401 ♂ Outer In. VS402	R100		†L538		3 1/8	3 11/16	2 1/8	3-3/16, 1-1/16	P839	.875	2 1/16	F	PB715	8
11	IS147	VS316	R44		†L520		3 5/8	3 7/8	2 1/16	3-3/16, 1-1/16	P774	.875	2 13/16	F	PB715	6
12	IS135	VS351 ♂ Outer In. VS352	R100		†L538		3 1/8	3 11/16	2 1/8	3-3/16, 1-1/16	P839	.875	2 1/16	F	PB715	8
13	IS136	VS351 ♂ Outer In. VS352	R100		†L520		3 5/8	3 7/8	2 1/16	3-3/16, 1-1/16	P774	.875	2 13/16	F	PB715	6
14	IS136	VS318 In. VS300	R100		†L520		3 5/8	3 7/8	2 1/16	3-3/16, 1-1/16	P774	.875	2 13/16	F	PB715	6
15	IS135	VS318 ♂ Outer In. VS300	R42 R100		†L538		3 1/8	3 11/16	2 1/8	3-3/16, 1-1/16	P839	.875	2 1/16	F	PB715	8
16	IS136	VS318 ♂ Outer In. VS300	R42 R100		†L520		3 5/8	3 7/8	2 1/16	3-3/16, 1-1/16	P774	.875	2 13/16	F	PB668	8
17	IS147	VS316	R44		†L487		3 1/4	3 7/8	2 1/16	3-3/16, 1-1/16	P039	.875	2 13/16	F	PB715	6
18		VS316	R44		†L486		3	3 11/16	2 1/8	3-3/16, 1-1/16	P725	.812	2 13/16	F	PB663	8
19		VS318 ♂ Outer In. VS300	R65		†L519		3 1/8	3 11/16	2 1/8	3-3/16, 1-1/16	P773	.812	2 5/8	F	PB706	8
20	IS136	VS318 ♂ Outer In. VS300	R65		†L520		3 5/8	3 7/8	2 1/16	3-3/16, 1-1/16	P774	.875	2 13/16	F	PB668	8
21		VS316	R44		†L486		3	3 11/16	2 1/8	3-3/16, 1-1/16	P725	.812	2 13/16	F	PB704	8
22	IS102	VS174	R44		†L469		3 1/8	3 11/16	2 1/4	3-3/16, 1-1/16	P773	.812	2 5/8	F	PB704	6
23		VS318 ♂ Outer In. VS300	R65		†L519		3 1/8	3 11/16	2 1/8	3-3/16, 1-1/16	P773	.812	2 5/8	F	PB706	8
24	IS136	VS318 ♂ Outer In. VS300	R65		†L520		3 5/8	3 7/8	2 1/16	3-3/16, 1-1/16	P774	.875	2 13/16	F	PB668	8
25	IS102	VS174	R44		†L469		3 1/8	3 11/16	2 1/4	3-3/16, 1-1/16	P773	.812	2 5/8	F	PB596	6
26		VS174	R44		†L485		2 7/8	3 7/16	2	3-3/16, 1-1/16	P724	.750	2 7/16	F	PB665	8
27	Out. VS265 In. VS300		R65		†L486		3	3 11/16	2 1/8	3-3/16, 1-1/16	P725	.812	2 13/16	F	PB663	8

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	NASH	1931-32	8-90, 9-90	Own	8	S504	V505	G144	G144
2	NASH	1930	450, Single Six	Own	6	S501	V502	G261	G261
3	NASH	1930	480, Twin Ignition Six	Own	6	S503	V503	G262	G262
4	NASH	1930	490, Twin Ignition Eight	Own	8	S504	V505	G144	G144
5	NASH	1929	430, Special Six	Own	6	S372	V372	G142	G142
6	NASH	1929	420, Standard Six	Own	6	S458	V458	G260	G260
7	NASH	1929	460, Adv. 6	Own	6	S365	V365	G144	G144
8	NASH	1927-28	Standard Six	Own	6	S336	V336	G140	G140
9	NASH	1927-28	Special Six	Own	6	S372	V372	G141	G141
10	NASH	1927-28	Advanced Six	Own	6	S365	V365	G143	G143
11	NASH	1926-27	Advanced Six	Own	6	S365	V365	G143	G143
12	NASH	1926	Special, 131 after 64853; 231 to No. 26276	Own	6	S372	V372	G141	G141
13	NASH	1926	Light Six, Standard Six	Own	6	S336	V336	G140	G140
14	NASH	1925	Special Six	Own	6	S305	V305	G141	G141
15	NASH	1925	Advanced Six (3 Brg.)	Own	6	S45	V45	G143	G143
16	NASH	1918-24	681-687, 691-698	Own	6	S45	V45	G139	G139
17	NASH	1923-24	4-41, 4-48	Own	4	S46	V46	G139	G139
18	NASH	1920-22	4-41	Own	4	S46	V46	G139	G139
19	NASH TRUCK	1918-25	4017, 2T	Buda HU	4	S108 ♂Grooved Stem S167	V108 V167	G200	G200
				Taper Grooved Stem卐					
20	NASH TRUCK	1917-25	2018, 3018, 4018, 1, 2, 3T	Own	4	S211	V211	G139	G139
21	NICHOLS-SHEPHARD COM.	1928-30	A, Prairie	Wauk. XA	4	S290	V290	G368	G369
22	NICHOLS-SHEPHARD COM.	1927-30	B, 10-12 Cut; C, 15 Cut; Red River, 15 Cut	Herc. OX	4	S199 S680	V199	G266	G266
				⅛" O. S. Hd. for S199卐					
23	NICHOLS-SHEPHARD COM.		D, 12-16-20 Cut Prairie	Herc. K	4	S600	V600	G414 ♂Plain G415	G414 G415
							Flanged卐		
24	NICHOLS-SHEPHARD COM.		E, F, 16-20-24 Cut Prairie	Herc. L	4	S600	V600	G414 ♂Plain G415	G414 G415
							Flanged卐		
25	OAKLAND	1930-31	O-8	Own	8	S513	V514	G125	G125
26	OAKLAND	1929	AA6	Own	6	S400	V401	G124	G124
27	OAKLAND	1928	AA6	Own	6	S400	V401	G124	G124
28	OAKLAND	1927	GO6, after Mtr. No. 123601	Own	6	S369	V369	G123	G123
29	OAKLAND	1926	O-6 to Mtr. No. 123601	Own	6	S50	V50	G123	G123
30	OAKLAND	1925	6-54B	Own	6	S50	V50	G123	G123
31	OAKLAND	1923-24	6-54	Own	6	S50	V50	G123	G123
32	OLDSMOBILE	1938	L38	Own	8	S948	V861	G463	G463

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1		Out. VS265 In. VS300	R65		†L487		3 1/4	3 7/8	2 5/16	3-1/8, 1-3/16	P039	.375	2 11/16	F	PB668	8
2	IS102	VS174	R44		†L469		3 1/8	3 1/16	2 1/4	3-1/8, 1-3/16	P773	.812	2 5/8	F	PB596	6
3	IS165	VS157 In. VS109	R42		†L468		3 3/8	3 7/8	2 3/8	3-1/8, 1-3/16	P633	.875	2 11/16	F	PB540	6
4		Out. VS265 In. VS300	R65		†L467		3 1/4	3 7/8	2 5/16	3-1/8, 1-3/16	P696	.875	2 3/4	O		
5		Out. VS44 In. VS109	R42		†L437		3 1/4	3 7/8	2 3/8	3-1/8, 1-3/16	P633	.875	2 11/16	F	PB540	6
6	IS102	VS174	R44		†L436		3 1/8	3 1/16	2 1/4	3-1/8, 1-3/16	P632	.8125	2 7/8	S	PB596	6
7	IS134	VS157 In. VS109	R42		†L438		3 7/16	4 1/32	2 13/32	3-1/8, 1-3/16	P634	.9375	2 7/8	F	PB644	6
8		VS49	R44		L440	†C586	3 1/8	3 7/16	1 7/8	3-1/8, 1-3/16	P586	.9375	2 11/16	S	PB582	6
9		Out. VS44 In. VS109	R44			†C524	3 1/4	3 11/16	1 5/16	4-1/8	P379	.875	3	S	PB540	6
10		Out. VS44 In. VS109	R42			†C456	3 7/16	4	1 5/8	4-3/16	P330	.9375	3 5/16	S	PB513	6
11		Out. VS44 In. VS109	R42	L47		†C64	3 1/4 3 1/4	4 4	1 5/8 1 5/8	4-3/16 3-1/8	P047 P047	.9375 .9375	3 3	S S	PB513 PB513	6 6
12		Out. VS44 In. VS109	R44			†C548	3 1/8	3 11/16	1 13/16	4-1/8	P242	.875	2 7/8	S	PB540	6
13		VS49	R44	L309		†C435	3	3 1/4	1 5/16	3-1/8	P274	.750	2 13/16	S	PB550	6
14		Out. VS44 In. VS109	R43			†C390	3 1/8	3 13/16	1 1/2	4-1/8	P242	.875	2 7/8	S	PB540	6
15		Out. VS44 In. VS109	R42	L47		†C64	3 1/4 3 1/4	4 4	1 5/8 1 5/8	4-3/16 3-1/8	P047 P047	.9375 .9375	3 3	S S	PB513 PB513	6 6
16		Out. VS44 In. VS109	R42	L47		†C64	3 1/4 3 1/4	4 4	1 5/8 1 5/8	4-3/16 3-1/8	P047 P047	.9375 .9375	3 3	S S	PB513 PB513	6 6
17		VS37	R42			†C309	3 3/8	3 1/2	1 5/8	4-1/8	P83	.9375	2 11/16	F		
18		VS37	R42	L47		†C64	3 1/4 3 1/4	4 4	1 5/8 1 5/8	4-3/16 3-1/8	P047 P047	.9375 .9375	3 3	S S	PB513 PB513	4 4
19		VS37				†C109	4 1/4	5 5/16	2 5/8	4-1/4	P080	1.125	3 11/16	S	PB517	4
20		VS76														
21	IS104	VS343	R28			†C640(B)	3 1/2	3 11/16	2 5/16	3-3/16	P719	.740	3 3/16	O		
22	IS111	VS205	R14			†C313(B)	4	4 7/8	2 5/16	3-1/4	P040	1.375	3 1/2	O	P586	8
23	IS153	VS203	R89			†C680(B)	4 1/4	5 1/4	2 1/2	4-3/16	P680	1.500	3 3/4	O		
24	IS153	VS203	R89			†C681(B)	4 1/2	5 1/4	2 1/2	4-3/16	P681	1.500	4	O		
25	IS101	VS264	R97			†C699	3 7/16	3 3/4	2 1/4	3-1/8, 1-3/16	P654	1.0625	3 3/32	AP	PB630	8
26	IS104	VS171	R46			†C654	3 3/8	3 11/16	2 3/16	3-3/16	P654	1.0625	3 3/32	AP	PB606	6
27	IS104	VS171	R46			†C573	3 1/4	4	2 3/16	3-3/16	P283	1.0625	2 11/16	S	PB554	6
28		VS171	R46	L311		†C469	2 7/8 2 7/8	3 3/16 3 3/16	1 13/16 1 13/16	3-1/8 3-1/8	P275 P275	.917 .917	2 5/8 2 5/8	S S	PB553 PB553	6 6
29		VS143	R45	L312		†C460	2 7/8	3 11/16	1 13/16	3-1/8	P230	.730	2 13/16	S	PB548	6
30		VS143	R45	†L131			2 7/8	3 11/16	1 13/16	3-1/8	P635	.730	2 13/16	F	PB559	6
31		VS178	R45			C335	2 13/16	3 7/16	1 7/8	3-1/4	P184	.730	2 11/16	F	PB559	6
32	IS101	VS411 VS428 ♂ Includes Damper	R101	†L638			3 1/4	3 15/16	2 13/64	2-3/32, 2-1/16	P941	.855	2 11/16	S	PB670	8

♂ Cam ground type but has cast relief and may be round ground.

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	OLDSMOBILE	1937-38	F37, F38	Own	6	S948	V861	G463	G463
2	OLDSMOBILE	1937	L37	Own	8	S948	V861	G463	G463
3	OLDSMOBILE	1936	F36	Own	6	S878	V861	G387	G387
4	OLDSMOBILE	1936	L36	Own	8	S879	V863	G381	G381
5	OLDSMOBILE	1935	F35	Own	6	S860 卐AS910	V861	G387	G387
6	OLDSMOBILE	1935	L35	Own	8	S862	V863	G381	G381
7	OLDSMOBILE	1934	F34	Own	6	S817 卐AS905	V818	G387	G387
8	OLDSMOBILE	1934	L34 to Mtr. L19020	Own	8	S819	V563	G381	G381
9	OLDSMOBILE	1934	L34 after Mtr. L19020	Own	8	S820	V821	G381	G381
10	OLDSMOBILE	1933	F33	Own	6	S560	V561	G382	G122
11	OLDSMOBILE	1933	L33	Own	8	S562	V563	G350	G318
12	OLDSMOBILE	1932	F32	Own	6	S560	V561	G268	G122
13	OLDSMOBILE	1932	L32	Own	8	S562	V563	G317	G318
14	OLDSMOBILE	1931	F31	Own	6	S475	V476	G268	G122
15	OLDSMOBILE	1930	F30	Own	6	S475	V476	G268	G122
16	OLDSMOBILE	1929	F29	Own	6	S475	V476	G268	G122
17	OLDSMOBILE	1928	F28, Eng. F59496, FL2806, FR1759 and up	Own	6	S444	V445	G122	G122
18	OLDSMOBILE	1928	F28 to Eng. F59496, FL2806, FR1759	Own	6	S418	V419	G122	G122
19	OLDSMOBILE	1927	30E	Own	6	S368	V368	G121	G121
20	OLDSMOBILE	1926	30D	Own	6	S317	V317	G120	G120
21	OLDSMOBILE	1925	30C	Own	6	S317	V316	G120	G120
22	OLDSMOBILE	1924-25	30A, B	Own	6	S11	V11	G120	G120
23	OLIVER HART PARR TRAC.	1935-38	Row Crop 70; Kerosene or Distillate Fuel	Cont.	6	S1023	V1024	G469	G469
24	OLIVER HART PARR TRAC.	1935-38	Row Crop 70 Serial 200126 and up. Gasoline Fuel	Cont.	6	S1021	V1022	G469	G469
25	OLIVER HART PARR. TRAC.	1935	Row Crop 70 Serial 200001 to 200125. Gasoline Fuel	Cont.	6	S1019	V1020	G469	G469
26	OLIVER HART PARR TRAC.	1934-36	18-28 after 801027, Standard Row Crop after 103855	Wauk. VIS	4	S920	V919	G437	G437
27	OLIVER HART PARR TRAC.	1930-33	18-28 to 801027, Standard Row Crop to 103855	Wauk. VIS	4	S919	V919	G437	G437
28	OLIVER HART PARR TRAC.	1930-36	A-3-5, 28-44	Own	4	S932	S932	G446	G446
29	OLIVER HART PARR TRAC.	1927-32	12-24, 28-50	Own	2-4	S901	S901		
30	OLIVER HART PARR TRAC.	1925-26	16-30 Serial 24002 to 25999, 15-30, 30, 30D	Own	2	S282	S282	G351	G351
31	OLIVER HART PARR TRAC.		18-36	Own	2	S282	S282	G351	G351
32	OVERLAND	1928-29	98, 98A, Whippet 6	Own	6	S446	V446	G147	G147
33	OVERLAND	1928-31	96A, Whippet 4	Own	4	S473	V474	G147	G147

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS101	VS411 VS428 ♂ Includes	R101 Damper	†L618			$3\frac{7}{16}$	$4\frac{1}{32}$	$2\frac{15}{64}$	2-⅛, 2-$\frac{3}{16}$	P942	.855	$3\frac{5}{64}$	S	PB670	6
				♂ Cam ground type but has cast relief and may be round ground.												
2	IS101	VS411 VS428 ♂ Includes	R101 Damper	†L617			$3\frac{1}{4}$	$3\frac{15}{16}$	$2\frac{23}{64}$	2-⅛, 2-$\frac{3}{16}$	PB941	.855	$2\frac{11}{32}$	S	PB670	8
				♂ Cam ground type but has cast relief and may be round ground.												
3	IS146	VS350	R101	†L567			$3\frac{5}{16}$	$3\frac{15}{16}$	$2\frac{1}{4}$	2-⅛, 2-$\frac{3}{16}$	P880	.8556	$3\frac{1}{32}$	S	PB670	6
				♂ Cam ground type but has cast relief and may be round ground.												
4	IS101	VS350	R101	†L566			3	$3\frac{3}{4}$	$2\frac{11}{32}$	2-⅛, 2-$\frac{3}{16}$	P879	.8556	$2\frac{23}{32}$	S	PB725	8
				♂ Cam ground type but has cast relief and may be ground round.												
5	IS101	VS350	R101			†C864	$3\frac{5}{16}$	$3\frac{15}{16}$	$2\frac{1}{4}$	2-⅛, 1-$\frac{3}{16}$	P804	.855	$3\frac{1}{32}$	S	PB670	6
						†C895	$3\frac{5}{16}$	$3\frac{15}{16}$	$2\frac{1}{4}$	2-⅛, 2-$\frac{3}{32}$	P804	.855	$3\frac{1}{32}$	S	PB670	6
6	IS101	VS350	R101			†C867	3	$3\frac{3}{4}$	$2\frac{3}{16}$	3-⅛, 1-$\frac{3}{16}$	P867	.855	$2\frac{11}{32}$	S	PB670	8
7	IS101	VS338	R101			†C761	$3\frac{5}{16}$	$3\frac{7}{8}$	$2\frac{3}{16}$	2-⅛, 1-$\frac{3}{16}$	P804	.855	$3\frac{1}{32}$	S	PB670	6
8	IS145	VS336	R49			†C762	3	$3\frac{11}{16}$	$2\frac{1}{8}$	3-⅛, 1-$\frac{3}{16}$	P762	.855	$2\frac{5}{16}$	S	PB670	8
9	IS145	VS336	R101			†C762	3	$3\frac{11}{16}$	$2\frac{1}{8}$	3-⅛, 1-$\frac{3}{16}$	P762	.855	$2\frac{5}{16}$	S	PB670	8
10	IS145	VS336	R49			†C804	$3\frac{3}{8}$	$3\frac{7}{8}$	$2\frac{3}{16}$	2-⅛, 1-$\frac{3}{16}$	P804	.855	$3\frac{1}{32}$	S	PB670	6
11	IS101	VS336	R49			†C762	3	$3\frac{11}{16}$	$2\frac{1}{8}$	3-⅛, 1-$\frac{3}{16}$	P762	.855	$2\frac{5}{16}$	S	PB670	8
12	IS146	VS325	R49			†C761	$3\frac{5}{16}$	$3\frac{7}{8}$	$2\frac{3}{16}$	2-⅛, 1-$\frac{3}{16}$	P804	.855	$3\frac{1}{32}$	S	PB670	6
13	IS146	VS325	R49			†C762	3	$3\frac{11}{16}$	$2\frac{1}{8}$	3-⅛, 1-$\frac{3}{16}$	P762	.855	$2\frac{5}{16}$	S	PB696	8
14	IS102	VS297	R49			†C655	$3\frac{5}{16}$	$3\frac{7}{8}$	$2\frac{3}{16}$	2-⅛, 1-$\frac{3}{16}$	P655	.855	$2\frac{7}{8}$	S	PB670	6
15	IS102	VS175	R49			†C655	$3\frac{5}{16}$	$3\frac{7}{8}$	$2\frac{3}{16}$	2-⅛, 1-$\frac{3}{16}$	P655	.855	$2\frac{7}{8}$	S	PB670	6
16	IS102	VS175	R49			†C655	$3\frac{5}{16}$	$3\frac{7}{8}$	$2\frac{3}{16}$	2-⅛, 1-$\frac{3}{16}$	P655	.855	$2\frac{7}{8}$	S	PB616	6
17		VS175	R48			†C593	$3\frac{5}{16}$	$3\frac{7}{8}$	$2\frac{3}{16}$	2-⅛, 1-$\frac{3}{16}$	P655	.855	$2\frac{7}{8}$	S	PB592	6
18		VS175	R41			†C593	$3\frac{5}{16}$	$3\frac{7}{8}$	$2\frac{3}{16}$	2-⅛, 1-$\frac{3}{16}$	P655	.855	$2\frac{7}{8}$	S	PB592	6
19	Out. VS212 In. VS211		R41			†C475	$2\frac{7}{8}$	$3\frac{3}{8}$	$1\frac{7}{8}$	2-⅛, 1-$\frac{3}{16}$	P251	.855	$2\frac{1}{2}$	S	PB544	6
				L362			$2\frac{7}{8}$	$3\frac{7}{16}$	$1\frac{7}{8}$	2-⅛, 1-$\frac{3}{16}$	P251	.855	$2\frac{1}{2}$	S	PB544	6
20		VS53	R45			†C400	$2\frac{3}{4}$	$3\frac{3}{8}$	$1\frac{7}{8}$	2-⅛, 1-$\frac{3}{16}$	P251	.855	$2\frac{1}{2}$	S	PB544	6
				L320			$2\frac{3}{4}$	$3\frac{7}{16}$	$1\frac{7}{8}$	2-⅛, 1-$\frac{3}{16}$	P251	.855	$2\frac{1}{2}$	S	PB544	6
21		VS53	R45			†C400	$2\frac{3}{4}$	$3\frac{3}{8}$	$1\frac{7}{8}$	2-⅛, 1-$\frac{3}{16}$	P251	.855	$2\frac{1}{2}$	S	PB544	6
				L320			$2\frac{3}{4}$	$3\frac{7}{16}$	$1\frac{7}{8}$	2-⅛, 1-$\frac{3}{16}$	P251	.855	$2\frac{1}{2}$	S	PB544	6
22		VS53	R45			†C322	$2\frac{3}{4}$	$3\frac{1}{4}$	$1\frac{7}{8}$	3-$\frac{3}{16}$	P85	.855	$2\frac{5}{16}$	F	PB528	6
				L130			$2\frac{3}{4}$	$3\frac{7}{16}$	$1\frac{7}{8}$	2-⅛, 1-$\frac{3}{16}$	P85	.855	$2\frac{5}{16}$	F	PB528	6
23		VS432	R153			†C973	$3\frac{1}{8}$	$3\frac{5}{16}$	2	3-⅛, 1-$\frac{3}{16}$	P973	.859	$2\frac{23}{32}$	F	PB726	6
				Sleeve Assembly SA44												
24		VS432	R153			†C973	$3\frac{1}{8}$	$3\frac{5}{16}$	2	3-⅛, 1-$\frac{3}{16}$	P973	.859	$2\frac{23}{32}$	F	PB726	6
				Sleeve Assembly SA44												
25		VS432	R153			†C973	$3\frac{1}{8}$	$3\frac{5}{16}$	3	3-⅛, 1-$\frac{3}{16}$	P973	.859	$2\frac{23}{32}$	F	PB726	6
				Sleeve Assembly SA44												
26		VS391	R28			†C979	$4\frac{1}{8}$	$4\frac{7}{8}$	$2\frac{21}{32}$	4-$\frac{3}{16}$	P979	1.3125	$3\frac{7}{8}$	S	PB742	4
				Sleeve Assembly SA46												
27	IS130	VS391	R28			†C979	$4\frac{1}{8}$	$4\frac{7}{8}$	$2\frac{21}{32}$	4-$\frac{3}{16}$	P979	1.3125	$3\frac{7}{8}$	S	PB742	4
				Sleeve Assembly SA46												
28	IS140	VS392	R143			†C924	$4\frac{3}{4}$	$5\frac{1}{2}$	$2\frac{13}{16}$	4-$\frac{3}{16}$	P924	1.500	$4\frac{5}{8}$	S	PB743	4
				Sleeve Assembly SA33												
29	IS119	VS376	R128			†C747(B)	$5\frac{3}{4}$	7	$3\frac{3}{4}$	3-$\frac{5}{16}$	P747	1.497	$5\frac{3}{32}$	O	PB735	4-8
				High Comp. C923(B)			$5\frac{3}{4}$	$7\frac{1}{4}$	4	3-$\frac{5}{16}$	P747	1.497	$5\frac{3}{32}$	O	PB735	4-8
30		VS376	R128													
31		VS376	R128			†C746(B)	$6\frac{3}{4}$	$8\frac{7}{8}$	$4\frac{7}{8}$	4-$\frac{5}{16}$	P746	2.169	$5\frac{11}{32}$	O	PB734	4
32	IS101	VS164	R51		†L401	C600	$3\frac{1}{8}$	$3\frac{3}{4}$	2	2-⅛, 1-$\frac{5}{32}$	P600	.797	$2\frac{7}{8}$	S	PB593	6
33	IS101	VS164	R51		†L401	C600	$3\frac{1}{8}$	$3\frac{3}{4}$	2	2-⅛, 1-$\frac{5}{32}$	P600	.797	$2\frac{7}{8}$	S	PB593	4

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

(6-1-38)

Ov-Pi Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	OVERLAND	1926-28	96, Whippet 4	Own	4	S371	V371	G147	G147
2	OVERLAND	1925-27	6-93, 6-93A, Whippet 6	Own	6	S325	V325	G146	G146
3	OVERLAND	1923-26	91, 92	Own	4	S80	V80	G145	G145
4	OVERLAND	1919-22	Four	Own	4	S56	V56	G145	G145
5	PACKARD	1938	1600, Six	Own	6	S990	V991	G480	G481
6	PACKARD	1938	1601, 1602, Eight	Own	8	S990	V992	G480	G481
7	PACKARD	1937	Six, 115C	Own	6	S957	V958	G388	G389
8	PACKARD	1937	120C	Own	8	S957	V959	G388	G389
9	PACKARD	1935-36	120, 120B	Own	8	S865	V866	G388	G389
10	PACKARD	1933-34	905, 906, 1005, 1006, 1107, 1108	Own	12	S813	V813	G127	G128
11	PACKARD	1932-36	901, 902, 1001, 1002, 1101, 1102, 1200, 1201, 1202, 1400, 1401, 1402	Own	8	S471	V472	G127	G128
12	PACKARD	1932-36	903, 904, 1003, 1004, 1103, 1104, 1203, 1204, 1205, 1403, 1404, 1405	Own	8	S407	V408	G127	G128
13	PACKARD	1930-31	740, 745, 840, 845	Own	8	S407	V408	G127	G128
14	PACKARD	1929-31	626, 633, 726, 733, 826, 833	Own	8	S471	V472	G127	G128
15	PACKARD	1928-29	443, 526, 533, 640, 645	Own	6-8	S407	V408	G127	G128
16	PACKARD	1926-27	326, 333, 336, 343, 426, 433	Own	6-8	S350	V351	G127	G128
17	PACKARD	1925	236, 243	Own	8	S350	V351	G127	G128
18	PACKARD	1923-24	136, 143	Own	8	S58	V312	G127	G128
19	PACKARD	1923-25	126, 226, 133, 233	Own	6	S58	V58	G127	G128
20	PACKARD TRUCK	1916-22	E, 3, 4T	Own	4	S148	V149	G221	G222
21	PACKARD TRUCK	1916-22	E, 5, 6T	Own	4	S148	V149	G221	G222
22	PACKARD TRUCK	1921-22	EC, EX, 2T	Own	4	S150	V151	G220	G220
23	PACKARD TRUCK	1918-21	E, 1, 1½, 2T	Own	4	S150	V151	G220	G220
24	PAIGE	1927	8-85	Lyc. 4H	8	S318 卐AS855	V319	G168	G168
25	PAIGE	1927	6-75	Own	6	S73	V73	G252	G252
26	PAIGE	1926-27	6-65, 6-72	Own	6	S73	V73	G252	G252
27	PAIGE	1926	6-45	Cont. 19L	6	S355	V355	G184	G184
28	PAIGE	1926	6-40	Cont. 9L	6	S357	V358	G184	G184
29	PAIGE	1921-25	6-66, 6-70	Cont. 6J	6	S61	V61	G189	G189
30	PARRETT TRAC.	1935-36	Six	Herc. IXB	4	S907	V908	G429	G429
31	PEERLESS	1929-30	St. 8, 125	Cont. 12K	8	S447	V448	G265	G265
32	PEERLESS	1929-30	6-61, 6-81, 61A	Cont. 11E	6	S391	V392	G229	G229
33	PEERLESS	1927-29	6-90, 6-91	Own	6	S22	V22	G206	G206
34	PEERLESS	1927-28	6-60	Cont. 10E	6	S391	V392	G229	G229
35	PEERLESS	1927-28	6-80	Cont. 8U	6	S343	V344	G225	G225
36	PEERLESS	1924-26	6-70, 6-72	Own	6	S22	V22	G206	G206
37	PEERLESS	1916-28	56, 66, 67, 69	Own	8	S9	V9	G159	G159
38	PIERCE ARROW	1931-33	41, 42, 43, 54, 836	Own	8	S412 卐AS794	V413	G172	G172

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS — STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS101	VS85	R14		L442	†C474	3 1/16	3 5/16	2	2-3/16, 1-1/4	P322	.734	2 13/16	O		
				L316			3 1/16	3 1/16	2	3-1/8	P322	.734	2 13/16	O		
2		VS64	R14	†L133		C434	3	3 1/16	2	3-1/8	P0133	.734	2 11/16	O		
3		VS139	R14			†C285	3 1/16	3 1/16	1 7/8	2-1/4	P059	.734	3 1/16	O		
4		VS139	R14			†C267	3 5/16	3 1/16	1 7/8	3-1/4	P051	.734	2 7/8	O		
5		VS424	R157		†L631		3 1/16	3 7/16	2 1/16	2-3/16, 1-1/4	P968	.875	3	F	PB720	12
6		VS424	R157		†L632		3 1/4	3 7/16	2 1/16	2-3/16, 1-1/4	P866	.875	2 15/16	F	PB720	16
7		VS346	R121		†L601		3 1/16	3 7/16	2 1/16	2-3/16, 1-1/4	P934	.875	2 11/16	F	PB720	12
8		VS346	R121		†L558		3 1/4	3 7/16	2 1/16	2-3/16, 1-1/4	P866	.875	2 15/16	F	PB720	16
9	IS102	VS346	R121		†L558		3 1/4	3 7/16	2 1/16	2-3/16, 1-1/4	P866	.875	2 15/16	F	PB720	16
10	IS165	VS312	R56													
11	IS102		R56		†L449		3 1/16	4 1/16	2 1/16	3-3/16, 1-1/4	P657	.875	2 15/16	F	PB601	8
12	IS165		R56		†L382		3 1/16	4 1/16	2 1/16	3-3/16, 1-1/4	P287	.875	3 1/16	F	PB614	8
13	IS165		R56		†L382		3 1/16	4 1/16	2 1/16	3-3/16, 1-1/4	P287	.875	3 1/16	F	PB614	8
14	IS102		R56		†L449		3 1/16	4 1/16	2 1/16	3-3/16, 1-1/4	P657	.875	2 15/16	F	PB601	8
15	IS165	VS183	R56		†L382		3 1/16	4 1/16	2 1/16	3-3/16, 1-1/4	P287	.875	3 1/16	F	PB614	6-8
16	IS165	VS183	R56		†L419		3 1/16	3 7/16	1 7/8	3-3/16	P287	.875	3 1/16	F	PB614	6-8
				L352			3 1/16	3 7/16	1 7/8	2-3/16, 1-1/4	P287	.875	3 1/16	F	PB614	6-8
						†C493	3 1/16	3 7/16	1 7/8	3-3/16	P287	.875	3 1/16	F	PB614	6-8
						C533	3 1/16	3 5/16	1 7/8	3-3/16	P287	.875	3 1/16	F	PB614	6-8
17	IS165	VS183	R56			†C583	3 5/16	3 5/16	1 7/8	4-3/16	P182	.875	2 13/16	F	PB614	8
				L246			3 5/16	3 7/16	1 7/8	2-3/16, 1-1/4	P182	.875	2 13/16	F	PB614	8
18		VS81	R53			†C298	3 5/16	3 5/16	1 7/8	4-3/16	P1	.750	3 1/16	S	PB591	8
				L245			3 5/16	3 7/16	1 7/8	2-3/16, 1-1/4	P1	.750	3 1/16	S	PB591	8
19		VS81	R53			†C298	3 5/16	3 5/16	1 7/8	4-3/16	P1	.750	3 1/16	S	PB524	6
				L245			3 5/16	3 7/16	1 7/8	2-3/16, 1-1/4	P1	.750	3 1/16	S	PB524	6
20		VS89				†C211	4 1/16	5 1/16	2 13/16	3-3/4	P024	1.250	4 1/16	S		
21		VS89				†C212	5	5 5/16	2 13/16	3-3/4	P5	1.250	4 13/16	S		
22		VS89				†C269	4 1/16	4 5/16	2 1/16	3-3/4	P4	1.125	3 13/16	S		
23		VS89				†C37	4	4 1/16	2 1/16	3-3/4	P4	1.125	3 13/16	S		
24	IS103	VS33	R1	L361			3 1/4	3 5/16	1 13/16	2-3/16, 1-1/4	P273	.875	2 15/16	O		
25		VS178	R69		†L391		3 5/16	3 13/16	2 1/16	4-3/16, 1-1/4	P597	1.000	2 13/16	O		
26		VS178	R69			†C569	3 1/4	3 13/16	2 1/16	3-1/4	P0114	1.000	2 13/16	S	PB530	6
27	IS102	VS162	R12			C472	2 7/8	3 1/16	1 13/16	2-3/16, 1-1/4	P701	.734	2 13/16	F	PB552	6
28	IS100	VS162	R12	L387	†L367		2 3/4	3 5/16	1 13/16	2-3/16, 1-1/4	P319	.734	2 5/16	F	PB552	6
						C457	2 3/4	3 5/16	1 13/16	3-1/4	P279	.734	2 1/16	S	PB552	6
29	Out. ~~VS92~~ In. ~~VS108~~		R34			†C312	3 5/16	4 1/16	2 5/16	3-1/4	P085	1.125	3 1/16	S	PB532	6
30	IS150	VS380	R133													
31	IS105	VS115	R13		†L389	C596	3 5/16	3 13/16	2 1/16	3-3/16, 1-1/4	P594	.859	2 7/8	F	PB600	8
32	IS135	VS231	R12		†L389	C596	3 5/16	3 13/16	2 1/16	3-3/16, 1-1/4	P594	.859	2 7/8	F	PB600	6
33		VS227	R3		†L394		3 1/16	3 5/16	1 7/8	2-3/16, 1-1/4	P604	1.125	2 13/16	F	PB532	6
34	IS135	VS216	R12		†L372		3 1/4	3 13/16	2 1/16	3-3/16, 1-1/4	P578	.859	2 5/16	F	PB600	6
35	IS165	VS231	R12			†C479	3 1/4	3 5/16	2 1/16	3-1/4	P282	1.000	2 13/16	S	PB558	6
					L433		3 1/4	3 5/16	2 1/16	3-3/16, 1-1/4	P518	1.000	2 5/16	F	PB558	6
36		VS227	R3			†C360	3 1/16	3 1/16	1 7/8	4-3/16	P037	.750	3 1/16	S		
						†C443	3 1/16	3 1/16	1 7/8	4-3/16	P281	1.125	3 1/16	S	PB532	6
37		VS11	R3			†C130	3 1/4	3 1/16	1 5/16	3-1/4	P070	.875	3	S		
				L70			3 1/4	3 1/16	1 5/16	3-3/16	P070	.875	3	S		
38	IS104	VS314	R54		†L456		3 1/16	4 1/16	2 13/16	3-3/16, 1-1/4	P667	.9375	3 1/16	O		

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

(6-1-38)

Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	PIERCE ARROW	1930	C	Own	8	S412 卐AS794	V413	G172	G172
2	PIERCE ARROW	1929-30	133, 143, A, B	Own	8	S412 卐AS794	V413	G172	G172
3	PIERCE ARROW	1927-29	36	Own	6	S281	V238	G244	G244
4	PIERCE ARROW	1928	81	Own	6	S320	V321	G250	G250
5	PIERCE ARROW	1925-27	80	Own	6	S320	V321	G250	G250
6	PIERCE ARROW	1922-27	30-32, 33 (Dual Valve)	Own	6	S157	V157	G244	G244
7	PIERCE ARROW	1916-20	48B4, 48-51, 38-31 (Dual Valve)	Own	6	S307	V307	G285	G285
8	PIERCE ARROW BUS	1928-29	Z, after Mtr. No. 340456	Own	6	S281	V238	G244	G244
9	PIERCE ARROW BUS	1927	Z, 30 Pass. to Mtr. No. 340456	Own	6	S238	V238	G244	G244
10	PIERCE ARROW BUS	1926	Z, 30 Pass.	Own	6	S164	V164	G250	G250
11	PIERCE ARROW TRUCK	1933-34	17T361, 27T361, 34T361, 3, 4T	Herc. WXC2	6	S624 卐AS970	V625	G267	G267
12	PIERCE ARROW TRUCK	1933-34	19R479, 22R479, 45X479, 3½, 6T	Herc. YXC3	6	S619 ♂Drilled Stem S659	V619 V659	G267	G266
				Slotted Stem☞					
13	PIERCE ARROW TRUCK	1932-34	15T298, 3, 3½T	Herc. WXB	6	S624 卐AS970	V625	G267	G267
14	PIERCE ARROW TRUCK	1932-34	13S385, 2, 2½T	Own	8	S412 卐AS794	V413	G172	G172
15	PIERCE ARROW TRUCK	1932-33	19R428, 121R428, 27R428, 3½, 4½, 5½T	Herc. YXC	6	S619 ♂Drilled Stem S659	V619 V659	G267	G266
				Slotted Stem☞					
16	PIERCE ARROW TRUCK	1932-33	22R501, 22X501, 28X501, 24X501, 28L501, 35R501T, 45X501T, 3½-7T	Herc. RXB	6	S659	V659	G267	G266
17	PIERCE ARROW TRUCK	1932-33	22X479, 4½-5½T	Herc. YXC2	6	S659	V659	G267	G266
18	PIERCE ARROW TRUCK	1928-31	FA1, 2, 3, 1½, 2T	Own 81	6	S320	V321	G250	G250
19	PIERCE ARROW TRUCK	1928-29	FA1, 2, 3, 1½, 2T	Own 80	6	S320	V321	G250	G250
20	PIERCE ARROW TRUCK	1920-28	XA, X4, XB, X5, 2, 3T	Own	4	S157	V157	G244	G244
21	PIERCE ARROW TRUCK	1920-28	W2, WC, RF, R10, 11, 12, RD	Own	4	S159 S164	V159 V164	G244	G244
				1/16" O. S. Head for S-V159☞					
22	PLOWMAN TRAC.	1919-22	13-30	Buda HU	4	S108 ♂Grooved Stem S167	V108 V167	G200	G200
				Taper Grooved Stem☞					
23	PLOWMAN TRAC.	1919-22	15-30	Buda YTU	4	S114 ♂Grooved Stem S115	V114 V115	G202	G202
				Taper Grooved Stem☞					
24	PLYMOUTH	1937-38	P3, P4, P5, P6	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
25	PLYMOUTH	1935-36	PJ, P1, P2	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338

*Indicates 1/32" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS104	VS266	R54		†L420		3⅜	4¼	2 13/32	3-⅛, 1-3/16	P624	.937	2⅞	O		
2	IS104	VS266	R54		†L456		3½	4¼	2 13/32	3-⅛, 1-3/16	P667	.9375	3 1/16	O		
3		VS217	R52													
4		VS112	R53		†L514		3½	4	2¼	2-⅛, 1-3/16	P646	1.000	3 1/16	F	PB656	6
5		VS112	R53			†C382	3½	3⅞	2 11/16	3-3/16	P252	.875	3⅛	F	PB612	6
				L315			3½	3⅞	2¼	3-⅛	P182	.875	2 31/32	F	PB612	6
6		VS217	R52			†C356	4	5½	3¼	3-3/16	P171	1.0625	3½	F	PB565	6
7			R52			C22	4½	5 3/16	2 7/16	3-¼	P561	1.125	4 1/16	S		
8		VS217	R52													
9		VS217	R52	*Tin-Plating can be your entree to a lot of new business—*												
10		VS217	R52	*go get it!*												
11	IS109	VS334	R146			†C811(B)	4⅛	4 3/16	2 3/16	4-1/16	P785	1.125	3 5/16	O		
12	IS130	VS334	R146			†C818(B)	4⅝	4⅞	2 5/16	4-3/16	P818	1.250	4 3/16	O		
13	IS109	VS334	R146			†C784(B)	3¾	4 3/16	2 3/16	4-1/16	P784	1.125	3⅜	O		
14	IS104	VS266	R54		†L456		3½	4¼	2 13/32	3-⅛, 1-3/16	P667	.9375	3 1/16	O		
						C716(B)	3½	3⅞	2 11/32	4-⅛, 1-3/16	P667	.9375	3 1/16	O	PB609	16
15	IS130	VS334	R146			†C786(B)	4⅜	4⅞	2 5/16	4-3/16	P786	1.250	3 15/16	O	PB672	12
16	IS130	VS334	R146	†L604 Aerotype			4½	4⅞	2 5/16	3-⅛, 1-3/16	P786	1.250	3 15/16	O		
17	IS130	VS334	R146			C787(B)	4½	4⅞	2 5/16	4-3/16	P786	1.250	3 15/16	O	PB672	12
				†L604 Aerotype			4½	4⅞	2 5/16	3-⅛, 1-3/16	P786	1.250	3 15/16	O		
18	IS165	VS112	R53		†L514		3½	4	2¼	2-⅛, 1-3/16	P646	1.000	3 1/16	F	PB656	6
19	IS165	VS112	R53			†C382	3½	3⅞	2 11/16	3-3/16	P252	.875	3⅛	F	PB612	6
				L315			3½	3⅞	2¼	3-⅛	P182	.875	2 31/32	F	PB612	6
20		VS14	R52	Split Skirt		†C230	4	5¼	2¾	3-3/16	P171	1.0625	3½	F	PB565	4
21	IS165	VS14	R52	Split Skirt		†C142	4⅛	6	3⅜	3-3/16	P173	1.125	3 31/32	F	PB549	4
						†C345	4½	6 1/16	3⅜	4-¼	P173	1.125	3 31/32	F	PB549	4
22	IS137	VS333	R6			†C109	4¼	5 5/16	2⅝	4-¼	P080	1.125	3 1/16	S	PB517	4
23	IS156	VS102	R7			†C210	4⅛	6 1/16	3	4-¼	P081	1.250	3 1/16	S	PB521	4
24	IS125	VS304	R101	†L612			3⅛	3 1/16	2	2-⅛, 2-5/32	P755	.859	2⅝	F	PB671	6
25	IS125	VS304	R101	†L543 Cam Ground Type			3⅛	3 1/16	2	2-⅛, 2-5/32	P755	.859	2⅝	F	PB671	6
				L588 Same as L543 except relieved for round grinding.												
				L612 U Slot Type			3⅛	3 1/16	2	2-⅛, 2-5/32						

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

(6-1-38)

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	PLYMOUTH	1933-34	PC, PD, PE, PF, PG	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
2	PLYMOUTH	1932	PB	Own	4	S573	V574	G106	G107
3	PLYMOUTH	1931	PA	Own	4	S72	V536	G106	G107
4	PLYMOUTH	1930	30U after Mtr. No. U220883	Own	4	S72	V536	G106	G107
5	PLYMOUTH	1929-30	Four, U	Own	4	S72	V424	G106	G107
6	PLYMOUTH TRK.	1938	PT57, ½T	Own	6	S588 AS751 卐AS779 S588AEX	V589 V589AIN	G337	G338
7	PONTIAC	1937-38	37-26, 38-26DA	Own	6	S936	V937	G344	G345
8	PONTIAC	1937-38	37-28, 38-28DA	Own	8	S938	V939	G344	G345
9	PONTIAC	1936	Master & De Luxe Six	Own	6	S875	V876	G344	G345
10	PONTIAC	1936	Eight	Own	8	S592	V593	G344	G345
11	PONTIAC	1935	Six	Own	6	S875	V876	G344	G345
12	PONTIAC	1933-35	Straight 8	Own	8	S592	V593	G344	G345
13	PONTIAC	1932	V8	Own	8	S513	V514	G125	G125
14	PONTIAC	1932	Six after No. 729001	Own	6	*S353	V564	G319	G126
15	PONTIAC	1929-31	Six Mtr. 490159 to 729001	Own	6	*S353	V468	G126	G126
16	PONTIAC	1929	Six Mtr. 410101 to 490158	Own	6	*S353	V468	G126	G126
17	PONTIAC	1926-28	Six to Mtr. No. 410101	Own	6	*S353	*V354	G126	G126
18	RELAY TRUCK	1932-33	60HC, 3½T	Herc. RXB	6	S659	V659	G267	G266
19	RELAY TRUCK	1932	100AC, 5T	Cont. 21R	6	S673	V674	G313	G314
20	RELAY TRUCK	1932	15AA, 15AB, ¾, 1T	Cont. 17E	6	S391	V392	G229	G229
21	RELAY TRUCK	1929-32	60 DA-B-C, 80, 70C, 80C	Buda BA6	6	S661	V220	G253	G253
22	RELAY TRUCK	1929-32	20B, S11, 1, 1½, 2T	Buda HS6	6	S640	V640	G240	G240
23	RELAY TRUCK	1928-31	50A, 40CA, 40CB, 40CC	Buda DW6	6	S610	V610	G236	G236
24	RELAY TRUCK	1928-31	1½, 2½T	Buda DS6	6	S668	V669	G236	G236
25	RELAY TRUCK	1929-30	50C, 60, 2½, 3T	Buda Bus	6	S205	V220	G253	G253
26	REO	1935-36	6A, 6D	Own	6	S891	V891	G402	G402
27	REO	1933-35	Royale, 2N, 4S, 7S	Own	6-8	S541	V381	G224	G224
28	REO	1933-34	S, 2S, 3S	Own Single Groove Single Groove	6	S831 卐AS1002 ♂ Double Groove S381 AS839	V831 V381	G224	G224
29	REO	1932	8-21, 8-25	Cont. R800	8	S582	V582	G224	G224
30	REO	1932	S	Own Single Groove Single Groove	6	S831 卐AS1002 ♂ Double Groove S381 AS839	V831 V381	G224	G224
31	REO	1931-32	Flying Cloud, 30 Royale 35, 8-31, 8-35	Own	8	S541	V381	G224	G224
32	REO	1931-32	Flying Cloud, 6-21	Own	6	S381 AS839	V381	G224	G224
33	REO	1929-30	Mate, 15	Cont. 16E	6	S391	V392	G229	G229
34	REO	1929-30	Master, 20, 25	Own	6	S381 AS839	V381	G224	G224

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS125	VS304	R101	†L524			3⅛	3 11/16	2	3-⅛, 1-5/32	P755	.859	2⅝	F	PB671	6
				L583 Same as L524 except relieved for round grinding.												
				†L543 Cam Ground Type			3⅛	3 11/16	2	2-⅛, 2-5/32	P755	.859	2⅝	F	PB671	6
				L588 Same as L543 except relieved for round grinding.												
2	IS114	VS303	R100	†L121			3⅝	4⅛	2	3-⅛, 1-5/32	P121	.749	3	O		
						C465	3⅝	4⅛	2	3-⅛	P121	.749	3	O		
3	IS107	VS185	R12	†L121			3⅝	4⅛	2	3-⅛, 1-5/32	P121	.749	3	O		
						C465	3⅝	4⅛	2	3-⅛	P121	.749	3	O		
4	IS107	VS185	R12	†L121			3⅝	4⅛	2	3-⅛, 1-5/32	P121	.749	3	O		
						C465	3⅝	4⅛	2	3-⅛	P121	.749	3	O		
5	IS107	VS185	R12	†L121			3⅝	4⅛	2	3-⅛, 1-5/32	P121	.749	3	O		
						C465	3⅝	4⅛	2	3-⅛	P121	.749	3	O		
6	IS125	VS304	R101	†L612			3⅛	3 11/16	2	2-⅛, 2-5/32	P755	.859	2⅝	F	PB671	6
7		VS408	R153			†C945	3 7/16	3 13/16	2 5/32	2-⅛, 1-3/16	P868	.9375	3 1/32	S	PB721	12
8		VS408	R153			†C885	3¼	3 13/16	2 5/32	2-⅛, 1-3/16	P799	.9375	2 31/64	S	PB716	16
9	IS103	VS317	R20			†C884	3⅜	3 13/16	2 5/32	2-⅛, 1-3/16	P868	.9375	3 1/32	S	PB721	12
10	IS100	VS317	R20			†C885	3¼	3 13/16	2 5/32	2-⅛, 1-3/16	P799	.9375	2 31/64	S	PB716	16
11	IS103	VS317	R20			†C868	3⅜	3 13/16	2 5/32	3-⅛, 1-3/16	P868	.9375	3 1/32	S	PB721	12
12	IS100	VS317	R20			†C799	3 5/16	3⅞	2 5/32	3-⅛, 1-3/16	P799	.9375	2 31/64	S	PB716	16
13	IS102	VS264	R46			†C764	3 7/16	3¾	2¼	3-⅛, 1-3/16	P764	1.0625	3⅛	S	PB630	8
14	IS100	VS291	R45			†C763	3 5/16	3 13/16	2⅛	2-⅛, 1-3/16	P763	1.0625	3	S	PB693	12
15	IS100	VS291	R45			†C665	3 5/16	3 13/16	2⅛	3-3/16	P665	1.0625	3 1/32	AP	PB606	6
16	IS100	VS51	R45			†C645	3 5/16	3 13/16	2⅛	3-3/16	P645	1.062	3 1/16	S	PB606	6
17	IS100	VS51	R45			†C471	3¼	4 1/32	2 1/16	3-3/16	P283	1.0625	2 11/16	S	PB554	6
18	IS130	VS334	R146	†L604 Aerotype			4½	4⅞	2 1/16	3-⅛, 1-3/16	P786	1.250	3 11/16	O		
19	IS130	VS221				†C776	4⅝	4 13/16	2¾	2-3/16, 1-¼	P776	1.250	3 13/16	F	PB617	6
	In.	VS283				†C823	4⅝	5 1/16	2¾	1-3/16, 2-3/16, 1-¼	P776	1.250	3 13/16	F	PB617	6
20	IS135	VS231	R12		†L389	C596	3⅜	3 11/16	2 1/16	3-⅛, 1-5/32	P594	.859	2⅞	F	PB600	6
21	IS130	VS236	R6			†C795	4⅛	5	2½	4-¼	P795	1.500	3 3/16	F	PB627	6
22	IS165	VS246	R7			†C604	3⅜	3⅞	1⅞	4-3/16	P604	1.125	2 11/16	F	PB621	6
23	IS143	VS242	R7			†C721	3¾	4⅝	2⅛	4-3/16	P721	1.375	3	F	PB589	6
24	IS143	VS242	R7													
25	IS130	VS236	R6			†C695	4	5	2½	4-¼	P695	1.499	3 13/16	F	PB627	6
26	IS144	VS309	R101	†L597			3⅝	4	2 1/16	3-3/16, 1-¼	P728	.984	2 31/32	F	PB664	12
				L534			3⅝	4	2 1/16	2-3/16, 1-3/16, 1-5/16	P728	.984	2 31/32	F	PB664	12
27	IS107	VS309	R60	†L524			3⅝	4	2 1/16	2-3/16, 1-3/16, 1-5/16	P728	.984	2 31/32	F	PB664	12-16
				L597			3⅝	4	2 1/16	3-3/16, 1-¼	P728	.984	2 31/32	F	PB664	12
				♂ Cam ground type but has cast relief and may be round ground.												
28	IS144	VS173	R101	†L524			3⅝	4	2 1/16	2-3/16, 1-3/16, 1-5/16	P728	.984	2 31/32	F	PB664	12
			R60	L597			3⅝	4	2 1/16	3-3/16, 1-¼	P728	.984	2 31/32	F	PB664	12
				♂ Cam ground type but has cast relief and may be round ground.												
29	IS102				†L399		3	3⅝	2⅛	3-⅛, 1-3/16	P615	.859	2 1/32	F	PB634	8
30	IS144	VS309	R101	L549			3⅛	4	2 1/16	2-3/16, 1-3/16, 1-5/16	P854	.984	2⅝	F		
			R60	♂ Cam ground type but has cast relief and may be round ground.												
31	IS107	VS173	R60	†L489			3⅜	4	2 1/16	3-⅛, 1-3/16	P728	.984	2 31/32	F	PB664	16
32	IS144	VS173	R60	†L488			3⅝	4	2 1/16	3-⅛, 1-3/16	P727	.984	3 1/32	O		
					L410		3⅝	4	2¼	4-⅛, 1-3/16	P727	.984	3 1/32	O		
33	IS135	VS202	R12		†L389	C596	3⅜	3 11/16	2 1/16	3⅛, 1-5/32	P594	.859	2⅞	F	PB600	6
34	IS144	VS173	R60	†L488			3⅝	4	2 1/16	3-⅛, 1-3/16	P727	.984	3 1/32	O		
					L410		3⅝	4	2¼	4-⅛, 1-3/16	P727	.984	3 1/32	O		

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	REO	1927-28	Wolverine	Cont. 15E	6	S391	V392	G229	G229
2	REO	1927-28	Flying Cloud	Own	6	S381 AS839	V381	G224	G224
3	REO	1920-27	T6, U6	Own	6	S95 S396	V96 V425	G181	G191
				1/16" O. S. Head for S95-V96					
4	REO	1918-19	M, N	Own	4	S90	V94	G181	G191
5	REO TRUCK	1935-38	1A4, 1C4, 1½T	Own	6	S792	V793	G412	G412
6	REO TRUCK	1933-37	2B, 2D, 2H, 2J, 2K, 2L, 2B4, 2D4, 2-4T	Own	6	S381 AS839 ♂ Single Groove	V381	G224	G224
				Double Groove		S831 卐AS1002	V831		
				Double Groove					
7	REO TRUCK	1933-36	1B, 1D, S4, 1B4, 1D4, ½-2½T	Own	6	S831 卐AS1002 ♂ Double Groove	V831	G224	G224
				Single Groove		S381 AS839	V381		
				Single Groove					
8	REO TRUCK	1933-35	4H, 4J, 4K, 4M, 4-6T	Own	8	S541	V381	G224	G224
9	REO TRUCK	1932-35	3H, 3J, 3K, 3L, 3-5T	Own	6	S381 AS839 ♂ Single Groove	V381	G224	G224
				Double Groove		S831 卐AS1002	V831		
				Double Groove					
10	REO TRUCK	1931-33	1A, 1C	Buda H205	4	S696	V697	G396	G397
11	REO TRUCK	1931-32	1B, 1D to 1B-1549 & 1D-1949	Buda J214	6	S691	V692	G398	G399
12	REO TRUCK	1931-32	4H, 4J, 4K, 4-6T	Buda	6	S706	V707		
13	REO TRUCK	1932	DFX, FAX, FEX, FFX, FCX, FDX, FHX, GA, GC, GD	Own	6	S381 AS839	V381	G224	G224
14	REO TRUCK	1929-31	Gold Crown, FB, FC, FD	Own	6	S381 AS839	V381	G224	G224
15	REO TRUCK	1928-30	Speedwagon Jr., BA, DA, DC	Cont. 16E	6	S391	V392	G229	G229
16	REO TRUCK	1928	FA, FE, FF, FC, FD, GA, GC, GD	Own	6	S95 S396	V295 V628	G181	G191
				1/16" O. S. Head for S95-V295					
17	REO TRUCK	1925-27	G, 2T	Own	6	S95 S396	V96 V425	G181	G191
				1/16" O. S. Head for S95-V96					
18	REO TRUCK	1918-26	Speedwagon 1, 1¼T	Own	4	S90	V94 ♂ Drilled Stem V97	G182	G183
				Slotted Stem					
19	REPUBLIC TRK.	1929-30	75-6, 76-6, 88-6, after Motor No. 4SL-26996	Lyc. 4SL	6	S318 卐AS855	V319	G168	G168
20	REPUBLIC TRK.	1928-29	75-6, 76-6, 50, to Motor No. 4SL-26996	Lyc. 4SL	6	S318 卐AS855	V319	G168	G168

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS							PISTON PINS				PIN BUSHINGS	
				STOCK NO.			SPECIFICATIONS									
				Alloy	Strut	Iron	Diam.	Lgth.	Comp.	Rings Used	Stock No.	Diam.	Lgth.	Type	Stock No.	No. Used
1	IS135	VS118	R12		†L372		3¼	3 15/16	2 5/16	3-1/8, 1-5/32	P578	.859	2¾	F	PB600	6
2	IS144	VS173	R60	†L385			3¼	4 1/32	2 3/32	3-1/8, 1-3/16	P585	.984	2 31/32	O		
					L409		3¼	4 1/32	2 3/32	3-1/8, 1-1/8	P585	.984	2 31/32	O		
3	IS130	VS147 ♂Exh. VS35 ♂Int.	R61 ♂Exh. R59 ♂Int.	†L132D ♂Solid Skirt Deep Grooves			3 3/16	4	2 9/32	3-3/16	P0102	.9845	2⅞	S	PB507	6
				L132S ♂Solid Skirt Shallow Grooves			3 3/16	4	2 9/32	3-3/16	P0102	.9845	2⅞	S	PB507	6
				L102S ♂Split Skirt Shallow Grooves			3 3/16	4	2 9/32	3-3/16	P0102	.9845	2⅞	S	PB507	6
						C151	3 3/16	4	2¼	3-3/16	P0102	.9845	2⅞	S	PB507	6
4		VS147 ♂Exh. VS24 ♂Int.	R61	*Thompson Silcrome Valves will lick that tough job*												
5		VS372	R122	†L614			3 3/16	3 5/16	2	3-3/32, 1-¼	P881	.859	2 31/32	F	PB726	6
				†L572 ♂Cam ground type but has cast relief and may be round ground.			3 3/16	3 5/16	2	2-3/32, 1-3/32, 1-5/16	P881	.859	2 31/32	F	PB726	6
6	IS144	VS173	R60 R101	†L597			3⅜	4	2 7/32	3-3/32, 1-¼	P728	.984	2 27/32	F	PB664	12
				†L534 ♂Cam ground type but has cast relief and may be round ground.			3⅜	4	2 7/32	2-3/32, 1-3/32, 1-3/16	P728	.984	2 27/32	F	PB664	12
7	IS144	VS173	R101 R60	†L549 ♂Cam ground type but has cast relief and may be round ground.			3⅛	4	2 11/32	2-3/32, 1-5/32, 1-3/16	P854	.984	2⅝	F	PB664	12
8	IS107	VS309	R60	†L597			3⅜	4	2 7/32	3-3/32, 1-¼	P728	.984	2 27/32	F	PB664	16
				†L534 ♂Cam ground type but has cast relief and may be round ground.			3⅜	4	2 7/32	2-3/32, 1-3/32, 1-3/16	P728	.984	2 27/32	F	PB664	16
9	IS144	VS173	R60 R101	†L613			3⅝	4½	2 11/32	3-3/32, 1-¼	P833	.984	3 3/32	F	PB664	12
				†L533 ♂Cam ground type but has cast relief and may be round ground.			3⅝	4½	2 11/32	2-3/32, 1-3/32, 1-3/16	P833	.984	3 3/32	F	PB664	12
10	IS136					†C794	3 13/16	3¾	2	3-1/8, 1-1/8	P793	1.125	3 1/32	F	PB662	4
11	IS146					†C792	3⅜	3 13/16	2	3-1/8, 1-3/16	P792	1.000	2 31/32	F	PB661	6
12																
13	IS107	VS173	R60	†L488			3⅜	4	2 11/32	3-1/8, 1-3/16	P727	.984	3 1/32	O		
					L410		3⅜	4	2¼	4-1/8, 1-3/16	P727	.984	3 1/32	O		
14	IS107	VS173	R60	†L488			3⅜	4	2 11/32	3-1/8, 1-3/16	P727	.984	3 1/32	O		
					L410		3⅜	4	2¼	4-1/8, 1-3/16	P727	.984	3 1/32	O		
15	IS135	VS202	R12		†L389	C596	3⅜	3 15/16	2 5/16	3-1/8, 1-5/32	P594	.859	2⅞	F	PB600	6
16		VS147 ♂Exh. VS35 ♂Int.	R61 ♂Exh. R59 ♂Int.	†L435			3 3/16	4⅛	2 13/32	3-3/16	P0102	.9845	2⅞	S	PB507	6
17		VS147 ♂Exh. VS35 ♂Int.	R61 ♂Exh. R59 ♂Int.	†L132D ♂Solid Skirt Deep Grooves			3 3/16	4	2 9/32	3-3/16	P0102	.9845	2⅞	S	PB507	6
				L132S ♂Solid Skirt Shallow Grooves			3 3/16	4	2 9/32	3-3/16	P0102	.9845	2⅞	S	PB507	6
				L102S ♂Split Skirt Shallow Grooves			3 3/16	4	2 9/32	3-3/16	P0102	.9845	2⅞	S	PB507	6
						C151	3 3/16	4	2¼	3-3/16	P0102	.9845	2⅞	S	PB507	6
18		VS147 ♂Exh. VS24 ♂Int.	R61 ♂Exh. R59 ♂Int.	†L54D ♂Solid Skirt Deep Grooves			4⅛	4¾	2⅜	3-3/16	P056	1.225	3⅝	O		
				L54S ♂Solid Skirt Shallow Grooves			4⅛	4¾	2⅜	3-3/16	P056	1.225	3⅝	O		
						C8	4⅛	4¾	2⅜	3-1/8	P056	1.225	3⅝	O		
19	IS103	VS33	R1		†L397		3¼	3 15/16	2 7/16	2-1/8, 2-3/16	P613	.875	2 29/32	O		
						C739(B)	3¼	4	2 7/16	3-1/8, 1-1/8	P613	.875	2 29/32	O	PB527	12
20	IS103	VS33	R1			†C584	3¼	4	2 7/16	3-1/8, 1-1/8	P79	.875	3	S	PB590	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	REPUBLIC TRK.	1929-30	35, 35-4, 2, 2½T	Lyc. C	4	S326	V326	G166	G166
						♂ Narrow Groove 11/32"		from end	
				Wide Groove 11/32" from end‡		S375	V375		
				Wide Groove 13/32" from end‡		S51	V51		
2	REPUBLIC TRK.	1928-30	65, L1, 3, 3½T	Lyc. TS	6	S601	V602	G166	G166
3	REPUBLIC TRK.	1927-30	60, H1, 2½T	Lyc. TF	6	S601	V602	G166	G166
4	REPUBLIC TRK.	1927-30	75, 76, 77, 1½T	Lyc. CT	4	S326	V326	G166	G166
						♂ Narrow Groove 11/32"		from end	
				Wide Groove 11/32" from end‡		S375	V375		
				Wide Groove 13/32" from end‡		S51	V51		
5	REPUBLIC TRK.	1926-30	15, 15W, 2T	Wauk. V	4	S611	V611	G326	G327
6	REPUBLIC TRK.	1927-29	25, 25W, 30W, 3, 4½T	Wauk. FU	4	S131	V131	G210	G209
7	REPUBLIC TRK.	1925-28	11X, 15, 2T	Cont. J4	4	S100	V100	G195	G195
8	REPUBLIC TRK.	1925-28	19, 25, 25W, 3T	Cont. K4	4	S107	V107	G193	G193
9	REPUBLIC TRK.	1925-28	20, 30, 4, 4½T	Cont. L4	4	S101	V101	G193	G193
						♂ Grooved Stem			
				Taper Grooved Stem‡		S608	V608		
10	REPUBLIC TRK.	1925-26	35, 5T	Wauk. DU	4	S126	V126	G210	G209
						卐AS730			
				⅛" O. S. Head for S126‡		S660			
				S126 with ⅛" Stem‡		S711			
11	RICKENBACKER	1926	8-80	Own	8	S301	V301	G165	G164
12	RICKENBACKER	1925-26	D	Own	8	S301	V301	G165	G164
13	RICKENBACKER	1925-26	E	Own	6	S301	V301	G165	G164
14	ROAMER	1927-29	8-78	Lyc. GT	8	S379	V380	G168	G168
15	ROAMER	1925-29	8-80, 8-88	Lyc. 4HM	8	S318	V319	G168	G168
						卐AS855			
16	ROCK ISLAND TRACTOR	1928-35	18-35, F, FA	Buda YRA	4	S114	V114	G199	G199
						♂ Grooved Stem			
				Taper Grooved Stem‡		S115	V115	G202	G202
17	ROCK ISLAND TRACTOR	1922-28	5-10, M2	LeRoi 2C	4	S212	V212	G370	G370
18	ROCK ISLAND TRACTOR		15-27	Wauk. PU7	4	S127	V127	G211	G212
19	ROCKNE	1932-33	6-65, 10	Own	6	S565	V584	G324	G324
						卐AS971			
20	ROCKNE	1932	6-75 (Export)	Own EXB	6	S567	V568	G332	G332
						卐AS856			
21	ROCKNE	1932	6-75	Own B	6	S567	V568	G332	G332
						卐AS856			
22	ROLLIN	1923-25	All	Own	4				
23	ROOSEVELT	1929-30	All	Own	8	S422	V423	G155	G155
24	RUGBY TRUCK	1932	614, 615, 616, 1, 1½T	Cont. 22A	6	S546	V392	G229	G229
25	RUGBY TRUCK	1929-30	Fast Mail, ¾T	Cont. 15L	6	S357	V358	G184	G184
26	RUGBY TRUCK	1928-30	Express, L, 1, 1¼T	Cont. 14L	6	S357	V358	G184	G184
27	RUGBY TRUCK	1929-30	401, MR, M2, 40	Cont. W5	4	S44	V44	G225	G225
28	RUTENBER MTR.	1916-25	22	Own	6	S6	V6	G272	G272
29	RUTENBER MTR.	1916-25	25	Own	6	S6	V6	G272	G272
30	SAMSON TRAC.	1920-21	M	Own	4	S296	S296		
				⅛" O. S. Head for S296‡		S297	S297		
31	SANFORD TRK.	1929-30	F, FL, 3, 4T	Cont. 16R	6	S639	V639		
						♂ 5/16" Stem			
						S673	V674	G313	G314
						♂ 11/32" Stem		♂ 11/32" I. D.	

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1		VS47	R36			†C461	4	4 7/8	2 1/8	3-1/16	P292	1.125	3 1/16	O		
2	IS114					†C679	3 7/8	4 5/8	2 5/8	4-1/16	P679	1.125	3 1/16	S	PB562	6
3	IS114					†C678	3 5/8	4 3/8	2 3/8	4-1/16	P678	1.125	2 11/16	S	PB562	6
4	IS113	VS47	R26			†C281	3 3/4	4 1/8	2 1/8	4-1/8	P292	1.125	3 1/16	O		
5	IS130	VS295	R28			†C677(B)	4	4 11/32	2 11/32	3-1/16	P677	1.000	2 5/8	O		
6	IS140					†C453(B)	4	5 1/32	3 3/32	3-1/4	P571	1.250	3 1/16	O		
7	IS132	VS198	R34			†C204	3 3/4	4 7/8	2 1/16	4-1/16	P085	1.125	3 1/16	S	PB532	4
8	IS137	VS73	R90			†C218	4 1/8	5 1/16	3 3/8	4-1/4	P148	1.250	3 1/16	S	PB579	4
9	IS140	VS67	R90 R91			†C158	4 1/2	5 1/16	3 5/8	4-1/4	P149	1.375	4	S	PB580	4
10	IS156					†C136(B)	4 1/2	5 7/8	3 5/8	3-1/4	P723	1.375	3 7/8	O		
11						†C636(B)	2 3/4	3 3/16	1 11/16	4-1/8	P636	1.000	2 1/4	O		
12						†C539(B)	3	3 7/8	1 5/8	4-1/8	P331	1.000	2 5/8	O		
13						†C445(B)	3 1/4	4 1/16	1 11/16	4-1/8	P289	1.000	2 11/16	O		
14	IS102	VS83	R2			†C575(B)	2 3/4	3 1/2	1 11/16	4-1/8	P359	.875	2 1/4	O		
					L417		2 3/4	3 3/8	1 11/16	2-1/8, 1-3/16	P359	.875	2 1/4	O		
15	IS103	VS33	R1			†C561	3 1/4	3 1/2	1 11/16	4-1/8	P307	.875	2 7/8	S	PB551	8
16	IS121	VS102	R7			†C210	4 1/2	6 3/16	3	4-1/4	P081	1.250	3 11/16	S	PB521	4
17		VS394	R144			†C232	3 1/8	3 7/16	1 1/2	3-1/16	P143	.750	2 7/8	S	PB587	4
18						†C144(B)	4 3/4	5 11/16	3 3/16	3-1/4	P113	1.500	3 11/16	O		
19	IS150	VS326	R107			†C775(B)	3 1/8	3 3/4	2 3/16	3-1/8, 1-1/16	P775	.812	2 11/16	O	PB702	12
20	IS103	VS326	R107													
21	IS103	VS326	R107			†C766(B)	3 1/4	3 7/8	2 11/32	3-1/8, 1-3/16	P703	.875	2 7/8	O	PB655	12
22				†L271			3 1/4	4 1/4	2 9/16	4-1/8	P271	.860	2 11/16	O		
23		VS167	R41	†L457			2 3/4	3 3/32	1 31/32	2-1/8, 1-3/16	P648	.750	2 7/16	O		
24	IS135		R12		L372		3 1/4	3 13/16	2 1/16	3-1/8, 1-3/32	P578	.859	2 3/4	F	PB600	6
25	IS100	VS251	R12		†L402		2 7/8	3 7/16	2	3-1/8, 1-3/32	P701	.734	2 11/32	F	PB552	6
26	IS100	VS162	R12	L387	†L367		2 3/4	3 3/8	1 11/16	2-1/8, 1-3/16	P319	.734	2 3/8	F	PB552	6
						C457	2 3/4	3 3/8	1 11/16	3-1/16	P279	.734	2 1/16	S	PB552	6
27	IS165	VS62	R12	L381	†L368	C442	3 3/8	4	1 13/16	2-1/8, 1-1/16	P209	.859	2 13/16	F	PB546	4
						C388	3 3/8	3 1/2	1 11/16	2-1/8, 1-1/16	P209	.859	2 13/16	F	PB546	4
				L380			3 3/8	3 3/8	1 11/16	2-1/8, 1-1/16	P209	.859	2 13/16	F	PB546	4
28						†C169	3	3	1 1/2	3-1/16	P020	.750	2 11/16	S		
29																
30						†C399	4	4 5/32	2 5/32 ..	3-1/4	P581	1.125	3 1/2	O		
31	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C709	4	4 13/32	2 31/32	3-1/16, 1-1/4	P709	1.250	3 13/32	F	PB617	6
						†C821	4	5 3/32	2 31/32	1-1/16, 2-5/32, 1-1/4	P709	1.250	3 13/32	F	PB617	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	SANFORD TRK.	1929	F, 2T	Cont. 16C	6	S641	V344	G225	G225
2	SANFORD TRK.	1929	AX	Cont. 18E	6	S391	V392	G229	G229
3	SANFORD TRK.	1929	A, 1, 1½T	Cont. 31L	6	S357	V358	G184	G184
4	SANFORD TRK.	1928	W6, S2T, 1½, 2, 3T	Buda DW6	6	S610	V610	G236	G236
5	SANFORD TRK.	1926-27	W6-20, 2½, 3T	Cont. 6B	6	S287	V287	G189	G189
				Taper Grooved Stem☞		♂Grooved Stem S288	V288		
6	SANFORD TRK.	1925-27	W4, W50, 3½, 5T	Cont. B7	4	S129	V129	G193	G193
7	SCHACHT TRK.	1935-38	10B, 12B, 8A, 10A, 12A, 1-3T	Herc. JXB	6	S701 卐AS772	V702	G386	G386
8	SCHACHT TRK.	1935-38	15B, 15A, 110CU, 115CU, 2½-3½T	Herc. JXC	6	S701 卐AS772	V702	G386	G386
9	SCHACHT TRK.	1935-38	18A, 18B, 20A, 120CU, 1¾-5T	Herc. JXD	6	S701 卐AS772	V702	G386	G386
10	SCHACHT TRK.	1935-38	28A, 28B, 128CU, 35A, 4-7T	Herc. WXC3	6	S624 卐AS970	V625	G267	G267
11	SCHACHT TRK.	1935-36	66HA, TRDB, 8-15T	Herc. RXB	6	S659	V659	G267	G266
12	SCHACHT TRK.	1933-38	35HA, 25B, 25A, 125CU, 3½, 7T	Herc. WXC2	6	S624 卐AS970	V625	G267	G267
13	SCHACHT TRK.	1933-38	TRDA, 40A, TRCU, 8-15T	Herc. YXC3	6	S619 ♂Drilled Stem S659	V619 V659	G267	G266
				Slotted Stem☞					
14	SCHACHT TRK.	1932-36	40H, 40HA, 40HB, TRD, 5-10T	Herc. YXC	6	S619 ♂Drilled Stem S659	V619 V659	G267	G266
				Slotted Stem☞					
15	SCHACHT TRK.	1931-34	10H, 10HA, 15HA, 1½, 2½T	Cont. 16C	6	S641	V344	G225	G225
16	SCHACHT TRK.	1931-34	20HA, 25H, 28H, 28HA, 30H, 30HA, 2½, 4½T	Herc. WXC	6	S624 卐AS970	V625	G267	G267
17	SCHACHT TRK.	1930-33	20H, 20HA, 2, 2½T	Herc. WXB	6	S624 卐AS970	V625	G267	G267
18	SCHACHT TRK.	1929-31	60, 65, 70, 5, 6, 7½T	Wauk. SRL	6	S676 卐AS754	V677	G330	G331
19	SCHACHT TRK.	1929	LN6W, 3, 3½T	Wauk. KU	6	S620	V620	G326	G327
20	SCHACHT TRK.	1929	JW, 2T	Wauk. XL	6	S612	V612	G413	G413
21	SCHACHT BUS	1929-30	27 Pass.	Wisc. Z	6	S644	V644		
22	SCHACHT BUS	1929	21-30 Pass.	Wauk. KU	6	S620	V620	G326	G327
23	SCRIPPS MARINE		E4, E6	Own	4-6	S615	S615		
24	SCRIPPS MARINE		F4, F6	Own	4-6	S616	S616		
25	SELDEN TRUCK	1929-31	47CB1, 47D, 3½, 4T	Cont. 18R	6	S639 ♂⅜" Stem S673 ♂$\frac{7}{16}$" Stem	V639 V674	G313 ♂$\frac{1}{16}$" I. D.	G314
26	SELDEN TRUCK	1928-31	317, 37, 1½, 2T	Cont. 16C	6	S641	V344	G225	G225
27	SELDEN TRUCK	1929	7, 1T	Cont. 29L	6	S357	V358	G184	G184
28	SELDEN TRUCK	1928-29	17, 1T	Cont. 18E	6	S391	V392	G229	G229
29	SELDEN TRUCK	1928	24, 27, Pacemaker	Cont. 12C	6	S641	V344	G225	G225
30	SELDEN TRUCK	1928	60, 67, 4, 5T	Cont. 8T	6	S642	V643		
31	SELDEN TRUCK	1927	Pacemaker, 1¼T	Cont. S4	4	S263	V263		
32	SELDEN TRUCK	1926-27	Roadmaster, 2¼, 3T	Cont. 6B	6	S287 ♂Grooved Stem S288	V287 V288	G189	G189
				Taper Grooved Stem☞					
33	SELDEN TRUCK	1925-26	50, 2½T	Cont. K4	4	S107	V107	G193	G193

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS165	VS231	R12		†L389	C596	3⅝	3 1/16	2 1/16	3-1/16, 1-3/32	P594	.859	2⅞	F	PB600	6
2	IS135	VS231	R12		†L389	C596	3⅝	3 1/16	2 1/16	3-1/16, 1-3/32	P594	.859	2⅞	F	PB600	6
3	IS100	VS251	R12			†C472	2⅞	3 3/32	1 31/32	2-1/16, 1-1/16	P701	.734	2 13/32	F	PB552	6
4	IS143	VS242	R7			†C721	3¾	4⅜	2⅛	4-3/16	P721	1.375	3	F	PB589	6
5	IS143	VS92 ♂ Outer VS108 ♂ Inner	R34 R98			†C312	3¾	4½	2⅝	3-3/16	P085	1.125	3 1/16	S	PB532	6
6	IS156	VS70	R90			†C418	5	5⅞	3 3/32	4-¼	P288	1.500	4 3/16	S	PB578	4
7	IS131	VS353	R126		†L562 Aerotype		3⅝	4 1/16	2 1/16	3-1/16, 1-1/16	P845	1.000	3 3/32	O		
						C845(B)	3⅝	4⅜	2 1/16	3-1/16, 1-1/16	P845	1.000	3 3/32	O		
8	IS131	VS353	R126		†L563 Aerotype		3¾	4⅛	2⅛	3-1/16, 1-1/16	P813	1.000	3⅜	O		
						C813(B)	3¾	4⅛	2⅛	3-1/16, 1-1/16	P813	1.000	3⅜	O		
9	IS131	VS353	R126		†L603 Aerotype		4	4 1/16	2 1/16	3-1/16, 1-1/16	P937	1.000	3½	O		
10	IS109	VS334	R146			C920(B)	4¼	4 1/16	2 1/16	4-3/16	P785	1.125	3⅝	O		
11	IS131	VS334	R146		†L604 Aerotype		4½	4⅞	2 1/16	3-1/16, 1-1/16	P786	1.250	3 1/16	O		
12	IS109	VS334	R146			†C811(B)	4⅛	4 1/16	2 1/16	4-3/16	P785	1.125	3⅝	O		
13	IS130	VS334	R146			†C818(B)	4⅝	4⅞	2 1/16	4-3/16	P818	1.250	4 1/16	O		
14	IS130	VS334	R146			†C786(B)	4⅝	4⅞	2 1/16	4-3/16	P786	1.250	3 1/16	O	PB672	12
15	IS165	VS231	R12		†L389	C596	3⅝	3 1/16	2 1/16	3-1/16, 1-3/32	P594	.859	2⅞	F	PB600	6
16	IS109	VS334	R146		†L571 Aerotype		4	4⅜	2 1/16	3-1/16, 1-1/16	P785	1.125	3⅝	O		
						†C785(B)	4	4 1/16	2 1/16	4-3/16	P785	1.125	3⅝	O		
17	IS109	VS334	R146			†C784(B)	3¾	4 1/16	2 1/16	4-3/16	P784	1.125	3⅜	O		
18	IS106	VS373	R28			†C782(B)	4⅝	4⅝	2 11/32	3-1/16, 1-1/16	P760	1.000	3⅞	O		
19	IS130	VS373	R28			†C760(B)	4¼	4 11/32	2 11/32	3-1/16, 1-1/16	P760	1.000	3⅞	O		
20	IS132	VS359	R28			†C640(B)	3½	3 11/32	2 1/16	3-3/16	P719	.740	3 3/16	O		
21	IS140 In.	VS396 ♂ Outer VS397	R28			†C431	4½	4 15/32	2¾	4-3/16	P722	1.187	3 11/32	WK	PB520	6
22	IS130	VS373	R28			†C760(B)	4¼	4 11/32	2 11/32	3-1/16, 1-1/16	P760	1.000	3⅞	O		
23																
24						*Avoid complaints—use factory duplicate pistons*											
25	IS130	VS221 ♂ Outer VS283 ♂ Inner	R13			†C709	4	4 13/32	2 13/32	3-3/16, 1-¼	P709	1.250	3 13/32	F	PB617	6
						†C821	4	5 3/32	2 13/32	1-3/16, 2-3/16, 1-¼	P709	1.250	3 13/32	F	PB617	6
26	IS165	VS231	R12		†L389	C596	3⅝	3 1/16	2 1/16	3-1/16, 1-3/32	P594	.859	2⅞	F	PB600	6
27	IS100	VS251	R12			C472	2⅞	3 3/32	1 31/32	2-1/16, 1-1/16	P701	.734	2 13/32	F	PB552	6
28	IS135	VS231	R12		†L389	C596	3⅝	3 1/16	2 1/16	3-1/16, 1-3/32	P594	.859	2⅞	F	PB600	6
29	IS165	VS231	R12			†C479	3¼	3¾	2 1/16	3-3/16	P282	1.000	2 13/32	S	PB558	6
				L433			3¼	3¾	2 1/16	3-1/16, 1-3/32	P518	1.000	2¾	F	PB558	6
30	IS148	VS198	R98			†C601	4⅛	4 11/32	2 11/32	3-¼	P601	1.250	3 3/16	S		
31	IS137	VS198	R34			†C473	4¼	4¾	2⅞	3-¼	P277	1.500	3 13/32	F	PB574	4
32	IS143	VS92 ♂ Outer VS108 ♂ Inner	R34 R98			†C312	3¾	4½	2⅝	3-3/16	P085	1.125	3 1/16	S	PB532	6
33	IS137	VS73	R90			†C218	4⅛	5 1/16	3⅜	4-¼	P148	1.250	3 11/32	S	PB579	4

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

(6-1-38)

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	SELDEN TRUCK	1925-26	52, 53, 70, 3, 3½T	Cont. L4	4	S101 ♂Grooved Stem S608	V101 V608	G193	G193
				Taper Grooved Stem☞					
2	SILVER KING TRACTOR	1935-36	R38 4 Wheel, R66 3 Wheel	Herc. IXA	4	S907	V908	G429	G429
3	STAR	1926	R, Six	Cont. SP	6	S357	V358	G225	G225
4	STAR	1925-26	All, Four	Cont. W5	4	S44	V44	G225	G225
5	STAR	1922-24	All, Four	Cont. SP	4	S44	V44	G225	G225
6	STAR TRUCK	1927-28	Fleetruck, 1T	Cont. 9L	6	S357	V358	G184	G184
7	STEARNS MOTOR		EU	Own	4	S645	S645	G366	G366
8	STEARNS MOTOR		DU	Own	4	S645	S645	G366	G366
9	STERLING TRK.	1937-38	FD140, 7-8T	Wauk. SRK	6	S722 卐AS752	V723	G330	G331
10	STERLING TRK.	1937-38	FC95, FD95, FBT152, FW152, 4½-10T	Wauk. MZ	6	S712	V612	G413	G413
11	STERLING TRK.	1935-38	FB50, FB60, FB70, FC90, FD70, FBT130, 2-8T	Wauk. BK	6	S780 卐AS914	V781	G421	G421
12	STERLING TRK.	1934-38	FC170, HC170, FCT250, FDT250, HCS210, FDS200, FCS210, HC185, HC200, HSC250, 9-18T	Wauk. RB	6	S126 卐AS730 S660 S711	V126	G210	G209
				⅛" O.S. Hd. for S126☞ S126 with ½" Stem☞					
13	STERLING TRK.	1934-38	FB80, FC90, FD90, FC100, 3½-5T	Wauk. MK	6	S612 ♂1⅞" Head S712	V612	G413	G413
				1⅞" Head☞					
14	STERLING TRK.	1933-34	FB70, FD80, FB90, 2½, 4T	Wauk. ML	6	S712	V612	G413	G413
15	STERLING TRK.	1932-38	FD97, FDT200, FCT200, HCT200, FD140, HC140, FC140, FC135, FD115, FDS180, 5-12½T	Wauk. 6-125	6	AS740	V969		
16	STERLING TRK.	1932-36	FB80, FD90, FBT152, FD152, FDT152, 3½-10T	Wauk. 6-110	6	卐AS771	V789	G459	G460
17	STERLING TRK.	1931-38	EW, FW, DC26, FW115, FD97, FC100, HC140, FDT180, FCT180, 5-10T	Wauk. SRL	6	S676 卐AS754	V677	G330	G331
18	STERLING TRK.	1932-34	FC145, FD, FW170, FCS180	Wauk. AB	6	S126 卐AS730 S660 S711	V126	G210	G209
				⅛" O. S. Head for S126☞ S126 with ½" Stem☞					
19	STERLING TRK.	1932-34	FB30, FB40, FB50, 1½, 2T	Cont. 25A	6	S546	V392	G229	G229
20	STERLING TRK.	1929-32	FB45, 55, DB9-64	Cont. 16C	6	S641	V344	G225	G225
21	STERLING TRK.	1930-31	4, 4½, 5, 7T	Wauk. KS	6	S620	V620	G326	G327
22	STERLING TRK.	1928-31	DW14-64, DW11-64, 3T	Wauk. XL	6	S612	V612	G413	G413
23	STERLING TRK.	1928-30	13-15, 63, 3, 4½T	Wauk. XK	6	S612	V612	G413	G413
24	STERLING TRK.	1929	DB7-64	Cont. 18E	6	S391	V392	G229	G229
25	STERLING TRK.	1928-29	DW40-T, 5T	Wauk. CU	4	S131	V131	G210	G209
26	STERLING TRK.	1928-29	EW20-44, 5T	Wauk. DU	4	S126 卐AS730 S660 S711	V126	G210	G209
				⅛" O. S. Head for S126☞ S126 with ½" Stem☞					

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS140	VS67	R90			†C158	4½	5 1/16	3 5/8	4-¼	P149	1.375	4	S	PB580	4
			R91													
2	IS150	VS380	R133	†L619 Aerotype			3	2 1/16	1 7/16	2-⅛, 1-3/16	P946	.750	2 1/16	O		
3		VS162	R12	L387	†L367		2¾	3⅜	1 1/16	2-⅛, 1-3/16	P319	.734	2 5/16	F	PB552	6
						C457	2¾	3⅜	1 1/16	3-3/16	P279	.734	2 1/16	S	PB552	6
4	IS165	VS63	R12	Long Skirt		†C442	3⅜	4	1 1/16	2-⅛, 1-3/16	P209	.859	2 11/16	F	PB546	4
				L381 Long Skirt			3⅜	4	1 1/16	2-⅛, 1-3/16	P209	.859	2 11/16	F	PB546	4
					L368		3⅜	4	1 1/16	2-⅛, 1-3/16	P209	.859	2 11/16	F	PB546	4
				♂ Long Skirt												
				Short Skirt		†C388	3⅜	3½	1 1/16	2-⅛, 1-3/16	P209	.859	2 11/16	F	PB546	4
				L380 Short Skirt			3⅜	3⅜	1 1/16	2-⅛, 1-3/16	P209	.859	2 11/16	F	PB546	4
5		VS63	R12	Short Skirt		†C213	3⅛	3¼	1 1/16	3-3/16	P092	.750	2¾	O		
				Long Skirt		C510	3⅛	4	1 1/16	3-3/16	P092	.750	2¾	O		
				L379 Long Skirt			3⅛	4	1 1/16	2-⅛, 1-3/16	P092	.750	2¾	O		
6	IS100	VS162	R12	L387	†L367		2¾	3⅜	1 1/16	2-⅛, 1-3/16	P319	.734	2 5/16	F	PB552	6
						C457	2¾	3⅜	1 1/16	3-3/16	P279	.734	2 1/16	S	PB552	6
7																
8						†C930	5⅛	6	3 5/8	4-3/16	P930	1.625	4 5/8	S	PB745	4
9	IS106	VS373	R28	†L569 Aerotype			4 5/8	5¼	2 7/8	3-5/32, 1-3/16	P877	1.375	4 13/16	AP	PB730	6
10	IS136	VS359	R28			C905(B)	4¼	4 5/8	2 11/32	3-⅛, 1-3/16	P677	1.000	3 5/8	O		
11	IS145	VS414	R149	†L605 Aerotype			3¾	4 5/8	2 11/32	3-⅛, 1-3/16	P939	1.000	3 11/32	F	PB729	6
12	IS121					†C814(B)	5	5⅝	3 3/32	4-3/16	P814	1.375	4 7/16	O		
						♂ Offset Bosses.										
13	IS111	VS359	R28			†C808(B)	4⅛	4 5/8	2 11/32	3-3/16	P677	1.000	3 5/8	O		
				†L570 Aerotype			4⅛	4½	2 11/32	3-⅛, 1-3/16	P878	1.000	3 11/32	AP	PB729	6
14	IS136	VS359	R28	†L568 Aerotype			4	4½	2 11/32	3-⅛, 1-3/16	P876	1.000	3 11/32	AP	PB729	6
						†C819	4	4⅜	2 11/32	3-3/16	P677	1.000	3 5/8	O		
15	IS132			†L620 Aerotype			4⅜	5 5/32	2 11/32	3-⅛, 1-3/16	P947	1.375	4¼	AP	PB730	6
16	IS132	VS415	R147	†L568 Aerotype			4	4½	2 11/32	3-⅛, 1-3/16	P876	1.000	3 11/32	AP	PB729	6
		♂ Exhaust														
		VS416														
		♂ Inlet-Outer														
		VS417														
		♂ Inlet-Inner														
17	IS106	VS373	R28			†C782(B)	4⅜	4 5/8	2 11/32	3-⅛, 1-3/16	P760	1.000	3 7/8	O	PB529	12
				†L620 Aerotype			4⅜	5 5/32	2 11/32	3-⅛, 1-3/16	P947	1.375	4¼	AP	PB730	6
18	IS121					†C723	4½	5	2 11/32	3-⅛, 1-3/16	P723	1.375	3 7/8	O		
19	IS135		R12		†L389	C596	3⅜	3 1/16	2 5/16	3-⅛, 1-5/32	P594	.859	2 7/8	F	PB600	6
20	IS165	VS231	R12		†L389	C596	3⅜	3 1/16	2 5/16	3-⅛, 1-5/32	P594	.859	2 7/8	F	PB600	6
21	IS130		R28			†C677(B)	4	4 1/32	2 13/32	3-3/16	P677	1.000	3 5/8	O		
22	IS111		R28			†C640(B)	3½	3 1/16	2 5/16	3-3/16	P719	.740	3 3/16	O		
23	IS111		R28			†C791	3¾	3 1/16	2 5/16	3-3/16	P791	.740	3 7/16	O		
24	IS135	VS231	R12		†L389	C596	3⅜	3 1/16	2 5/16	3-⅛, 1-5/32	P594	.859	2 7/8	F	PB600	6
25	IS140					†C454(B)	4⅜	5 1/32	3 3/32	3-¼	P112	1.250	3¾	O		
26	IS121					†C136(B)	4½	5⅞	3⅜	3-¼	P723	1.375	3 7/8	O		

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	STERLING TRK.	1920-25	A, 1½, 2, 2½T	Wauk. FU	4	S131	V131	G210	G209
2	STERLING TRK.	1918-25	C, 5, 7½T	Wauk. EU	4	S126 卐AS730 S660 S711	V126	G210	G209
				⅛" O. S. Head for S126					
				S126 with ½" Stem					
3	STEWART TRK.	1937-38	38-6, 31X, 3½-8T	Wauk. SRK	6	S722 卐AS752	V723	G330	G331
4	STEWART TRK.	1935-38	49A, 49H, 49AD, 3-4T	Wauk. BK	6	S780 卐AS914	V781	G421	G421
5	STEWART TRK.	1935-36	41H, 47H, 1, 2T	Wauk. BA	6	S780 卐AS914	V781	G421	G421
6	STEWART TRK.	1935-36	48H, 2½T	Wauk. BL	6	S780 卐AS914	V781	G421	G421
7	STEWART TRK.	1935	58X, 18XS, 3½T	Wauk. SRS	6	S676 卐AS754	V677	G330	G331
8	STEWART TRK.	1935-36	48-8, 3½T	Lyc. AEF	8	S774	V704	G406	G406
9	STEWART TRK.	1933-35	32X, 32X-551 to 32X-821, 29XS after 29XS-653	Lyc. ASD	6	S703	V704	G406	G406
10	STEWART TRK.	1935-36	32X after Serial 32X850, 3T	Lyc. ASE	6	S774	V704	G406	G406
11	STEWART TRUCK	1932-35	38-8, 48-8, 3, 5T	Lyc. AEC	8	S703	V704	G406	G406
12	STEWART TRUCK	1929-34	19X, 33X, 18X, 36X, 3½T	Lyc. TS	6	S601	V602 ♂ Narrow Groove	G166	G166
13	STEWART TRUCK	1932	30X, 1T	Lyc. WSG	6	S379	V380	G168	G168
14	STEWART TRK.	1931-35	31X, 27X, 38-6, 5-7T	Wauk. SRL	6	S676 卐AS754	V677	G330	G331
15	STEWART TRUCK	1930-31	32X, 32X-101 to 32X-550, 29XS, to 29XS-653	Lyc. ASA-B	6	S703	V704	G406	G406
16	STEWART TRUCK	1930-31	30, 40, 1, 1½T	Lyc. AFE	4				
17	STEWART TRUCK	1930	30X, 1T	Lyc. WR	6	S379	V380	G168	G168
18	STEWART TRUCK	1929-30	28X, 29X, 2T	Lyc. 4SL	6	S318 卐AS855	V319	G168	G168
19	STEWART TRUCK	1928-29	18X, 26XW, 2, 2½T	Lyc. TF	6	S601	V602	G166	G166
20	STEWART TRUCK	1925-29	16X, 17X, 25X, 1¼, 1½, 2T	Lyc. 4HM	6	S318 卐AS855	V319	G168	G168
21	STEWART TRUCK	1925-29	16, 17, 1½T	Lyc. CT	4	S326 ♂ Narrow Groove ⅜" from end S375 S51	V326 V375 V51	G166 from end	G166
				Wide Groove ⅜" from end					
				Wide Groove ⅝" from end					
22	STEWART TRUCK	1923-29	16, 1T	Lyc. CE	4	S326 ♂ Narrow Groove ⅜" from end S375 S51	V326 V375 V51	G166 from end	G166
				Wide Groove ⅜" from end					
				Wide Groove ⅝" from end					
23	STUDEBAKER	1938	7A, Six; 8A, Commander	Own	6	S565 卐AS971	V584	G410	G410
24	STUDEBAKER	1937	Dictator 5A, 6A	Own	6	S565 卐AS971	V584	G410	G410
25	STUDEBAKER	1937-38	President, 3C, 4C	Own	8	S565 卐AS971	V566	G332	G332
26	STUDEBAKER	1936	Dictator, 3A	Own	6	S565 卐AS971	V584	G410	G410
27	STUDEBAKER	1936	President, 2C	Own	8	S565 卐AS971	V566	G332	G332
28	STUDEBAKER	1934-35	Dictator, A, 1A	Own	6	S565 卐AS971	V584	G334	G334
29	STUDEBAKER	1934-35	Commander, B, 1B	Own	8	S565 卐AS971	V566	G332	G332
30	STUDEBAKER	1934-35	President, C, 1C	Own	8	S565 卐AS971	V566	G332	G332
31	STUDEBAKER	1933	Commander, 7S	Own	8	S565 卐AS971	V566	G332	G332

*Indicates $\frac{1}{32}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS							PISTON PINS				PIN BUSHINGS	
				STOCK NO.			SPECIFICATIONS									
				Alloy	Strut	Iron	Diam.	Lgth.	Comp.	Rings Used	Stock No.	Diam.	Lgth.	Type	Stock No.	No. Used
1	IS140					†C252(B)	4	5 5/16	3 1/16	3-1/4	P571	1.250	3 5/16	O		
2	IS121					†C145(B)	5	6 1/2	3 3/8	3-1/4	P159	1.375	4 7/16	O		
3	IS106	VS373	R28	†L569 Aerotype			4 5/8	5 1/4	2 7/8	3-1/32, 1-1/16	P877	1.375	4 33/64	AP	PB730	6
4	IS145	VS414	R149	†L605 Aerotype			3 3/4	4 3/8	2 11/32	3-1/8, 1-1/16	P939	1.000	3 11/64	F	PB729	6
5	IS145	VS414	R149													
6	IS145	VS414	R149													
7		VS373	R28			†C860(B)	4 1/8	4 5/8	2 31/32	3-1/8, 1-1/16	P677	1.000	3 5/8	O		
8																
9	IS132					C859	3 3/4	4 1/4	2 1/2	2-1/8, 2-1/16	P790	1.000	3 1/16	F		
10																
11	IS132					†C790	3 3/4	4 1/32	2 3/8	2-1/8, 2-1/16	P790	1.000	3 1/32	F		
12	IS114					†C679	3 7/8	4 3/8	2 3/8	4-1/16	P679	1.125	3 5/16	S	PB562	6
13	IS102	VS83	R2		L491		3	3 3/4	2 1/16	3-1/8, 1-1/16	P730	.875	2 1/2	O		
14	IS106	VS373	R28			†C782(B)	4 3/8	4 5/8	2 11/32	3-1/8, 1-1/16	P760	1.000	3 7/8	O	PB529	12
				†L620 Aerotype			4 5/8	5 1/16	2 11/32	3-1/8, 1-1/16	P947	1.375	4 1/4	AP	PB730	6
15	IS132					†C783(B)	3 5/8	4 1/4	2 1/2	2-1/8, 2-1/16	P783	1.000	3 1/16	O		
16						†C858	3 3/4	4 1/2	2 1/2	4-1/16	P858	.875	3 1/32	O		
17	IS102	VS83	R2		L465	†C874	2 7/8	3 3/4	2 1/16	3-1/8, 1-1/16	P612	.875	2 5/8	O		
18	IS103	VS33	R1		†L595		3 1/4	3 11/16	2 1/16	2-1/8, 2-1/16	P613	.875	2 25/32	O		
						C739(B)	3 1/4	4	2 1/16	3-1/8, 1-1/16	P613	.875	2 25/32	O	PB527	12
19	IS114					†C678	3 5/8	4 5/8	2 3/8	4-1/16	P678	1.125	2 11/16	S	PB562	6
20	IS103	VS33	R1			†C561	3 1/4	3 1/2	1 11/16	4-1/8	P307	.875	2 7/8	S	PB551	6
21	IS113		R26 R26			†C281	3 3/4	4 1/8	2 1/8	4-1/8	P292	1.125	3 1/16	O		
22		VS47	R26 R26	†L119		C307	3 11/16	4 1/8	2 1/8	4-1/8	P157	1.125	2 7/8	F	PB631	4
23	IS150	VS403	R107	†L639 ♂Cam ground type but has cast relief and may be round ground.			3 1/16	3 5/8	2 1/32	2-1/8, 1-1/16	P703	.875	2 7/8	O		
24	IS150	VS403	R107	†L575 Cam Ground Type L576 Same as L575 except relieved for round grinding.			3 1/4	3 5/8	2 1/16	2-1/8, 1-1/16	P703	.875	2 7/8	O		
25	IS150	VS403	R107	†L577 Cam Ground Type L578 Same as L577 except relieved for round grinding.			3 1/16	3 5/8	2 1/32	2-1/8, 1-1/16	P666	.875	2 5/8	O		
26	IS150	VS371	R107	†L575 Cam Ground Type L576 Same as L575 except relieved for round grinding.			3 1/4	3 5/8	2 1/16	2-1/8, 1-1/16	P703	.875	2 7/8	O		
27	IS150	VS371	R107	†L577 Cam Ground Type L578 Same as L577 except relieved for round grinding.			3 1/16	3 5/8	2 1/32	2-1/8, 1-1/16	P666	.875	2 5/8	O		
28	IS150	VS296	R107	†L530 Cam Ground Type L586 Same as L530 except relieved for round grinding.			3 1/4	3 5/8	2 1/16	3-1/8, 1-1/16	P703	.875	2 7/8	O		
29	IS150	VS296	R107	†L531 ♂Cam ground type but has cast relief and may be ground round.			3 1/16	3 5/8	2 1/32	3-1/8, 1-1/16	P666	.875	2 5/8	O		
30	IS150	VS296	R107	†L531 ♂Cam ground type but has cast relief and may be ground round.			3 1/16	3 5/8	2 1/32	3-1/8, 1-1/16	P666	.875	2 5/8	O		
31	IS150	VS326	R107			†C767(B)	3 1/16	3 11/16	2 1/32	3-1/8, 1-1/16	P666	.875	2 5/8	O	PB653	16

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	STUDEBAKER	1933	President, 82	Own	8	卐AS971 S565	V566	G332	G332
2	STUDEBAKER	1932-33	55, 56, 59	Own	6	S567 卐AS856	V568	G332	G332
3	STUDEBAKER	1929-33	President 8, 80, 90, 91, 92	Own	8	S412 卐AS794	V413	G172	G172
4	STUDEBAKER	1932	Dictator 62, 63	Own	8	S565 卐AS971	V566	G332	G332
5	STUDEBAKER	1932	Commander, 71	Own	8	S565 卐AS971	V566	G332	G332
6	STUDEBAKER	1931	54	Own	6	S439	V440	G173	G173
7	STUDEBAKER	1929-31	Dictator 8, 61	Own	8	S481	V482	G173	G173
8	STUDEBAKER	1929-31	Commander 8, 70	Own	8	S481	V482	G173	G173
9	STUDEBAKER	1930	Dictator Six	Own	6	S439	V440	G173	G173
10	STUDEBAKER	1930	Commander 6, GJ1 and up	Own	6	S439	V440	G173	G173
11	STUDEBAKER	1929	Commander Six	Own	6	S416	V416	G150	G151
12	STUDEBAKER	1928-29	Dictator Six after No. 9056	Own	6	S439	V440	G232	G232
13	STUDEBAKER	1928	Commander, President	Own	6	S416	V416	G150	G151
14	STUDEBAKER	1928	President (Late)	Own	8	S412 卐AS794	V413	G172	G172
15	STUDEBAKER	1928	President (Early)	Own	8	S412 卐AS794	V413	G172	G172
16	STUDEBAKER	1927	Dictator Six	Own	6	S415	V52	G232	G232
17	STUDEBAKER	1925-27	Standard Six	Own	6	S52	V52	G154	G154
18	STUDEBAKER	1922-27	Big Six	Own 6 ⅛" O. S. Head for S70		S70 S378	V70	G152	G153
19	STUDEBAKER	1919-27	Special Six	Own 6 ⅛" O. S. Head for S70		S70 S378	V70	G152	G153
20	STUDEBAKER	1924	Light Six	Own	6	S52	V52	G154	G154
21	STUDEBAKER	1920-23	Light Six, EJ	Own	6	S71	V71	G154	G154
22	STUDEBAKER	1918-21	S, F, ED, EG	Own 6 ⅛" O. S. Head for S70		S70 S378	V70	G152	G153
23	STUDEBAKER TR.	1938	J15, J15M, 1½-2T, J15B, Bus after Eng. 1T-21001; K15, K15M, 1½-2T, K15B, Bus	Own	6	S565 卐AS971	V584	G410	G410
24	STUDEBAKER TR.	1937-38	J15, J15M, 1T; J15B, Bus to Eng. 1T-21001	Own	6	S565 卐AS971	V584	G410	G410
25	STUDEBAKER TR.	1937-38	J20, J20M, K20, K20M, 2-3T	Herc. JXB	6	S701 卐AS772	V702	G386	G386
26	STUDEBAKER TR.	1937-38	J25, J25M, K25, K25M, 2½-4T	Herc. JXD	6	S701 卐AS772	V702	G386	G386
27	STUDEBAKER TR.	1937-38	J30, J30M, K30, K30M, 3-4T	Herc. WXC3	6	S624 卐AS970	V625	G267	G267
28	STUDEBAKER TR.	1936-37	2T2, 2M2, 2TB2, 1½-2T	Own	6	S565 卐AS971	V584	G410	G410
29	STUDEBAKER TR.	1935-36	Boss, 2W6, 2M6, 2-3T	Wauk. BM	6	S780 卐AS914	V781	G421	G421
30	STUDEBAKER TR.	1935-36	Mogul, 1W7, 2½-3½T	Wauk. BK	6	S780 卐AS914	V781	G421	G421
31	STUDEBAKER TR.	1935-36	Big Chief, W8, 1W8, 3-4T	Wauk. 6-110	6	卐AS771	V789	G459	G460

*Indicates ☆" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS							PISTON PINS				PIN BUSHINGS	
				STOCK NO.			SPECIFICATIONS									
				Alloy	Strut	Iron	Diam.	Lgth.	Comp.	Rings Used	Stock No.	Diam.	Lgth.	Type	Stock No.	No. Used
1	IS150	VS326	R107	L531	†L455		3 1/16	3 3/4	2 7/32	3-1/8, 1-3/16	P666	.875	2 5/8	O		
				♂ Cam ground type but has cast relief and may be ground round.												
2	IS103	VS326	R107			†C766(B)	3 1/4	3 7/8	2 11/32	3-1/8, 1-3/16	P703	.875	2 7/8	O	PB655	12
3	IS104	VS296	R54		†L456		3 1/2	4 1/4	2 13/32	3-1/8, 1-3/16	P667	.9375	3 1/16	O		
						C716(B)	3 1/2	3 7/8	2 13/32	4-1/8, 1-3/16	P667	.9375	3 1/16	O	PB609	16
4	IS150	VS326	R107			†C767(B)	3 1/16	3 13/16	2 7/32	3-1/8, 1-3/16	P666	.875	2 5/8	O	PB653	16
5	IS150	VS326	R107		†L455		3 1/16	3 3/4	2 7/32	3-1/8, 1-3/16	P666	.875	2 5/8	O		
6	IS103	VS275	R63			†C703(B)	3 1/4	3 7/8	2 11/32	3-1/8, 1-3/16	P703	.875	2 7/8	O	PB655	12
						♂ Skirt Ring										
7	IS150	VS275	R63			†C687(B)	3 1/16	3 13/16	2 7/32	3-1/8, 1-3/16	P666	.875	2 5/8	O	PB653	16
					L455		3 1/16	3 3/4	2 7/32	3-1/8, 1-3/16	P666	.875	2 5/8	O		
8	IS150	VS275	R63		†L455		3 1/16	3 3/4	2 7/32	3-1/8, 1-3/16	P666	.875	2 5/8	O		
9	IS103	VS275	R63			†C690(B)	3 3/8	3 7/8	2 11/32	4-1/8, 1-3/16	P690	.875	3	O	PB654	12
10	IS103	VS275	R63			†C672(B)	3 3/8	3 7/8	2 11/32	4-1/8, 1-3/16	P237	.875	3	WK	PB654	12
11	IS132	VS168	R99			†C672(B)	3 3/8	3 7/8	2 11/32	4-1/8, 1-3/16	P237	.875	3	WK	PB654	12
12	IS103	VS159	R63		L406	†C591(B)	3 3/8	3 7/8	2 13/32	3-1/8, 1-3/16	P237	.875	3	WK	PB539	12
13	IS132	VS168	R99			C444(B)	3 7/8	4 11/16	2 1/2	4-3/16	P066	1.000	3 7/16	O	PB529	12
				Light Weight		†C726(B)	3 7/8	4 11/16	2 17/32	4-3/16	P066	1.000	3 7/16	O	PB529	12
					L425		3 7/8	4 5/8	2 17/32	3-1/8, 1-3/16	P066	1.000	3 7/16	O		
14	IS104	VS170	R54		†L420		3 3/8	4 1/4	2 13/32	3-1/8, 1-3/16	P624	.937	2 7/8	O		
15	IS104	VS170	R54		†L390		3 3/8	4 1/4	2 7/16	3-1/8, 1-3/16	P620	.937	2 13/16	F	PB577	8
16	IS103	VS38	R63			†C389(B)	3 3/8	3 7/8	1 13/16	4-3/16	P237	.875	3	WK	PB539	12
17	IS107	VS38	R63			†C389(B)	3 3/8	3 7/8	1 13/16	4-3/16	P237	.875	3	WK	PB539	12
18	IS114	VS273	R114			†C444(B)	3 7/8	4 11/16	2 1/2	4-3/16	P066	1.000	3 7/16	O	PB529	12
				Light Weight		C726(B)	3 7/8	4 11/16	2 17/32	4-3/16	P066	1.000	3 7/16	O	PB529	12
					L425		3 7/8	4 5/8	2 17/32	3-1/8, 1-3/16	P066	1.000	3 7/16	O		
19	IS114	VS273	R114			†C56(B)	3 1/2	4 3/4	2 1/8	4-3/16	P030	1.000	3 1/16	O	PB506	12
					L30		3 1/2	4 3/4	2 1/8	3-3/16	P030	1.000	3 1/16	O		
20	IS107	VS38	R63			†C330(B)	3 1/8	3 5/8	1 13/16	4-3/16	P176	.875	2 3/4	WK	PB527	12
21		VS38	R63			†C86(B)	3 1/8	3 5/8	1 13/16	4-3/16	P58	.6875	2 11/16	WK		
22	IS114	VS273	R114			†C47	3 7/8	4 5/8	2 1/2	4-3/16	P029	1.125	3 3/16	S		
23		VS403	R107	†L639			3 5/16	3 3/4	2 3/16	2-1/8, 1-3/16	P703	.875	2 7/8	O		
				♂ Cam ground type but has cast relief and may be round ground.												
24	IS150	VS403	R107			†C935(B)	3 1/4	3 3/4	2 1/32	2-1/8, 1-3/16	P703	.875	2 7/8	O		
25	IS131	VS353	R126	†L562	Aerotype		3 5/8	4 3/16	2 3/16	3-1/8, 1-3/16	P845	1.000	3 5/32	O		
						C845(B)	3 5/8	4 3/8	2 3/16	3-1/8, 1-3/16	P845	1.000	3 5/32	O		
26	IS131	VS353	R126	†L603	Aerotype		4	4 5/16	2 3/16	3-1/8, 1-3/16	P937	1.000	3 1/2	O		
27	IS109	VS334	R146			C920(B)	4 1/4	4 5/16	2 3/16	4-3/16	P785	1.125	3 5/8	O		
28	IS150	VS403	R107			†C935(B)	3 1/4	3 3/4	2 1/32	2-1/8, 1-3/16	P703	.875	2 7/8	O		
29	IS145	VS414	R149	†L621	Aerotype		3 5/8	4 3/8	2 11/32	3-1/8, 1-3/16	P948	1.000	3 1/16	F	PB729	6
30	IS145	VS414	R149	†L605	Aerotype		3 3/4	4 3/8	2 11/32	3-1/8, 1-3/16	P939	1.000	3 11/32	F	PB729	6
31	IS132	VS415 ♂ Exhaust VS416 ♂ Inlet-Outer VS417 ♂ Inlet-Inner	R147	†L568	Aerotype		4	4 1/2	2 11/32	3-1/8, 1-3/16	P876	1.000	3 13/32	AP	PB729	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

St-Wa Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	STUDEBAKER TR.	1935-36	Ace, 1½-2T	Own	6	S567 卐AS856	V568	G332	G332
2	STUDEBAKER TR.	1930-34	S2, S4, S6, S8, T230, T430, T683, T641, T841, 1½-4T	Own	6	S567 卐AS856	V568	G332	G332
3	STUDEBAKER TR.	1930-32	77, 88, 99, 2½, 3½T	Own	8	S412 卐AS794	V413	G172	G172
4	STUDEBAKER TR.	1930-32	GN-P, GN-S, GN-N, SI	Own	6	S439	V440	G173	G173
5	STUDEBAKER TR.	1929	75HD, 76 Spec. 3, 3½T	Own ⅛" O. S. Head for S70	6	S70 S378	V70	G152	G153
6	STUDEBAKER TR.	1929	52B, ½T	Own	6	S508	V385	G309	G309
7	STUDEBAKER TR.	1928-29	GDN, ¾T	Own	6	S439	V440	G232	G232
8	STUTZ	1936-38	Package Car 90, 116	Herc. IXA	4	S907	V908	G429	G429
9	STUTZ	1927-28	AA	Own	8	S359	V359	G169	G170
10	STUTZ	1927	A	Own	8	S359	V359	G169	G170
11	STUTZ	1924	6-90	Own	6				
12	TERRAPLANE	1938	80, 81, 82, 88, (89, 112" W.B.)	Own	6	S995	V996	G477	G478
13	TERRAPLANE	1937	70 Commercial	Own	6	S884	V885	G404	G405
14	TERRAPLANE	1936-37	61, De Luxe, 62, Custom, 71, 72	Own	6	S884	V885	G404	G405
15	TERRAPLANE	1935	Special, De Luxe	Own	6	S825	V826	G115	G115
16	TERRAPLANE	1934	K, KU, Six	Own	6	S825	V826	G115	G115
17	TERRAPLANE	1933	KT, Eight	Own ⅛" O.S. Hd. for S302	8	*S302 S441	V518	G115	G115
18	TERRAPLANE	1932-33	K, KU, Six	Own	6	*S555	*V569	G115	G115
19	TWIN CITY TRAC.	1935-36	21-32 after Eng. 900001	Own	4	S903	S903	G357	G357
20	TWIN CITY TRAC.	1929-34	21-32 to Eng. 900000	Own	4	S903	S903	G357	G357
21	TWIN CITY TRAC.	1927-36	20-35, 27-44 after Eng. 200227	Own	4	S902	S283	G356	G426
22	TWIN CITY TRAC.	1921-26	20-35, 27-44 to Eng. 200226	Own	4	S283	S283	G426	G426
23	TWIN CITY TRAC.	1921-36	20-35, 27-44 with replacement head AE2108 or AE2109	Own	4	S902	S902	G356	G356
24	TWIN CITY TRAC.	1919-34	12-20, 17-28, TW, TY	Own ⅛" O. S. Head for S216	4	S216 S270	V216	G355	G355
25	TWIN CITY TRAC.		30-45	Own	4				
26	TWIN CITY TRAC.		40-65	Own	4				
27	TWIN CITY TRAC.		60-70	Own	4				
28	TWIN CITY TRAC.	1930-34	KT, MT, 11-20, 13-25	Own	4	S904	S904	G425	G425
29	VAN BLERCK		M6, Marine	Own	6	S213	S213		
30	VELIE	1928-29	8-88	Lyc. MD	8	S318 卐AS855	V319	G168	G168
31	VELIE	1926-28	60	Own	6	S348	V349	G240	G240
32	VELIE	1923-26	58	Own	6	S6	V6	G194	G194
33	VIKING	1929-30	V29, V30	Own	8	S485	V486	G256	G255
34	WALLIS TRACTOR	1917-26	CUB, JK, 15-25, OK	Own ⅛" O. S. Head for S-V200	4	S200 S214	V200 V214	G361	G361
35	WALLIS TRACTOR	1927-33	OK, Certified, 20-30	Own ⅛" O. S. Head for S-V200	4	S200 S214	V200 V214	G361	G361
36	WAUKESHA MTR.	1936-38	FS, FL	Own	4	S986	S986	G475	G475

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS							PISTON PINS				PIN BUSHINGS	
				STOCK NO.			SPECIFICATIONS									
				Alloy	Strut	Iron	Diam.	Lgth.	Comp.	Rings Used	Stock No.	Diam.	Lgth.	Type	Stock No.	No. Used
1	IS103	VS326	R107			†C766(B)	3¼	3⅞	2 11/32	3-3/16, 1-3/16	P703	.875	2⅞	O	PB655	12
2	IS103	VS326	R107			†C766(B)	3¼	3⅞	2 11/32	3-3/16, 1-3/16	P703	.875	2⅞	O	PB655	12
3	IS104	VS296	R54		L456		3½	4¼	2 13/32	3-3/16, 1-3/16	P667	.9375	3 1/16	O		
						†C716(B)	3½	3⅞	2 13/32	4-3/16, 1-3/16	P667	.9375	3 1/16	O		
4	IS103	VS275	R63			†C690(B)	3⅝	3⅞	2 11/32	4-3/16, 1-3/16	P690	.875	3	O	PB654	12
5	IS114	VS273	R114			†C726(B)	3⅞	4 11/32	2 17/32	4-3/16	P066	1.000	3 1/16	O	PB529	12
						C444(B)	3⅞	4 11/32	2 9/32	4-3/16	P066	1.000	3 1/16	O	PB529	12
					L425		3⅞	4⅝	2 17/32	3-3/16, 1-3/16	P066	1.000	3 1/16	O		
6		VS90	R12			†C590	2¾	3	1¾	3-3/16, 1-3/16	P590	.734	2 3/16	F	PB552	6
7	IS103	VS159	R63		L406	†C591(B)	3⅝	3⅞	2 11/32	3-3/16, 1-3/16	P237	.875	3	WK	PB539	12
8		VS380	R133	†L619	Aerotype		3	2 11/32	1 7/16	2-1/8, 1-3/16	P946	.750	2 1/16	O		
9	IS107	VS199				†C694	3¼	4 1/16	2 1/16	3-1/8	P694	.875	2 13/32	F	PB512	8
10	IS107	VS199				†C497	3 1/16	4 1/16	2 1/16	3-1/8	P039	.875	2 13/32	F	PB512	8
11		VS58				†C381	3⅝	4 1/16	2	3-3/16	P182	.875	2 13/32	F		
12		VS335	R16	†L552	Cam Ground Type		3	3 1/16	1 11/32	2-3/16, 2-1/16	P724	.750	2 1/16	F	PB505	6
				♂This piston not supplied in round ground type.												
13	IS102	VS335	R124	†L552	Cam Ground Type		3	3 1/16	1 11/32	2-3/16, 2-1/16	P724	.750	2 1/16	F	PB505	6
				♂This piston not supplied in round ground type.												
14	IS102	VS335	R124	†L552	Cam Ground Type		3	3 1/16	1 11/32	2-3/16, 2-1/16	P724	.750	2 1/16	F	PB505	6
				♂This piston not supplied in round ground type.												
15	IS102	VS335	R16	†L552	Cam Ground Type		3	3 1/16	1 11/32	2-3/16, 2-1/16	P724	.750	2 1/16	F	PB505	6
				♂This piston not supplied in round ground type.												
16	IS102	VS335	R16	†L517	Cam Ground Type		3	3 1/16	1 11/32	2-3/16, 1-3/16, 1-3/16	P724	.750	2 1/16	F	PB505	6
				L582 Same as L517 except relieved for round grinding.												
17	IS102	VS335	R16	†L516	Cam Ground Type		2 13/16	3 1/16	1 11/32	2-3/16, 1-3/16, 1-3/16	P724	.750	2 1/16	F	PB505	8
				L581 Same as L516 except relieved for round grinding.												
18	IS102	VS290	R16	†L516	Cam Ground Type		2 13/16	3 1/16	1 11/32	2-3/16, 1-3/16, 1-3/16	P724	.750	2 1/16	F	PB505	6
				L581 Same as L516 except relieved for round grinding.												
19	IS143	VS379	R131			†C897	4⅝	5½	2 13/16	4-¼	P897	1.250	3 11/16	S	PB603	4
20	IS143	VS379	R131			†C535	4½	5½	2 13/16	4-¼	P353	1.250	3 11/16	S	PB603	4
21		VS377	In. R130 Ex. R131			†C542	5½	6¾	3½	4-5/16	P355	1.625	5⅛	S	PB744	4
22		VS377	R130			†C542	5½	6¾	3½	4-5/16	P355	1.625	5⅛	S	PB744	4
23		VS377	R131			†C542	5½	6¾	3½	4-5/16	P355	1.625	5⅛	S	PB744	4
24	IS165	VS374	R129			†C517	4¼	5 1/16	2¾	4-¼	P353	1.250	3 11/16	S	PB603	4
				Sleeve Assembly SA20												
25						†C572	6¼	7¾	4⅜	4-⅜	P356	1.875	5 13/32	S		
26						†C340	7¼	10	5⅜	4-½	P357	2.1875	6 3/32	S		
27						†C536	7¾	10¼	5⅜	4-½	P358	2.1875	7⅛	S		
28		VS378	R132			†C517	4¼	5 1/16	2¾	4-¼	P353	1.250	3 11/16	S	PB603	4
				Sleeve Assembly SA20												
29																
30	IS103	VS33	R1		†L397		3¼	3 15/16	2 1/16	2-3/16, 2-1/16	P613	.875	2 13/32	O		
						C739(B)	3¼	4	2 1/16	3-3/16, 1-3/16	P613	.875	2 13/32	O	PB527	16
31		VS85				†C544	3 1/16	3⅞	2⅛	3-3/16, 1-3/16	P181	.875	2⅞	S	PB551	6
32						†C567	3 1/16	3½	1⅞	3-1/16	P181	.875	2⅞	S	PB551	6
33		VS215	R49			†C689	3⅝	3⅞	2 1/16	2-1/32, 1-3/16	P689	.856	3 1/16	S	PB622	8
34		VS360	R145			†C352	4¼	4¾	2⅝	3-¼	P112	1.250	3¾	O		
				Sleeve Assembly SA22												
35		VS360	R145			†C752	4⅝	4 11/16	2 1/16	3-¼	P752	1.249	3 13/16	O		
				Sleeve Assembly SA24												
36		VS420	R38													

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP=Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Wa-Wa Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	WAUKESHA MTR.	1934-38	VIL	Own	4	S919 ♂2" Head Diam. S920	V919	G437	G437
				1¾" Head Diam.					
2	WAUKESHA MTR.	1936-38	BA, BL	Own	6	S780 卐AS914	V781	G421	G421
3	WAUKESHA MTR.	1927-36	JS, JK	Own	4	S686	V686		
4	WAUKESHA MTR.	1930-36	WK	Own	4	S678	S678		
5	WAUKESHA MTR.	1930-36	MS	Own	6	S712	V612	G413	G413
6	WAUKESHA MTR.	1930-36	KL	Own	6	S611	V611	G326	G327
7	WAUKESHA MTR.	1927-36	WL, WS	Own	4	S627	V627		
8	WAUKESHA MTR.		L, LU4, LU7, M, MU4, MU7, J	Own	4	S127	V127	G211	G212
9	WAUKESHA MTR.	1936-38	FK	Own	4	S986	S986	G475	G475
10	WAUKESHA MTR.	1925-30	Z, ZA	Own	4	S290	V290	G368	G369
11	WAUKESHA MTR.	1927-36	X, XA	Own	4	S290	V290	G368	G369
12	WAUKESHA MTR.	1927-36	XL	Own	6	S612	V612	G413	G413
13	WAUKESHA MTR.	1936-38	BM	Own	6	S780 卐AS914	V781	G421	G421
14	WAUKESHA MTR.	1930-37	XAH	Own	4	S290	V290	G368	G369
15	WAUKESHA MTR.	1935-38	BK	Own	6	S780 卐AS914	V781	G421	G421
16	WAUKESHA MTR.	1928-31	XK	Own	6	S612	V612	G413	G413
17	WAUKESHA MTR.	1919-28	B, BX, BUX	Own	4	S201	V201	G213	G213
18	WAUKESHA MTR.	1934-38	6-110	Own	6	卐AS771	V789	G459	G460
19	WAUKESHA MTR.	1930-36	ML	Own	6	S612 ♂1⅛" Head S712	V612	G413	G413
				1⅛" Head					
20	WAUKESHA MTR.	1927-34	V	Own	4	S611	V611	G326	G327
21	WAUKESHA MTR.	1927-34	KS	Own	6	S620	V620	G326	G327
22	WAUKESHA MTR.	1924-32	FU	Own	4	S131	V131	G210	G209
23	WAUKESHA MTR.	1921-24	FU	Own	4	S131	V131	G210	G209
24	WAUKESHA MTR.	1934-38	VIS	Own	4	S919 ♂2" Head Diam. S920	V919	G437	G437
				1¾" Head Diam.					
25	WAUKESHA MTR.	1932-36	SRS	Own	6	S676 卐AS754	V677	G330	G331
26	WAUKESHA MTR.	1930-36	MK	Own	6	S612 ♂1⅛" Head S712	V612	G413	G413
				1⅛" Head					
27	WAUKESHA MTR.	1930-38	MZ	Own	6	S712	V612	G413	G413
28	WAUKESHA MTR.		VK	Own	4	S976	V977	G326	G327
29	WAUKESHA MTR.	1927-32	KU	Own	6	S620	V620	G326	G327
30	WAUKESHA MTR.	1918-28	BU4R	Own	4	S201	V201	G213	G213
31	WAUKESHA MTR.	1930-38	SRL	Own	6	S676 卐AS754	V677	G330	G331
32	WAUKESHA MTR.	1934-38	6-125	Own	6	AS740	V969		
33	WAUKESHA MTR.	1924-32	CU	Own	4	S131	V131	G210	G209
34	WAUKESHA MTR.	1919-24	CU	Own	4	S131	V131	G210	G209
35	WAUKESHA MTR.	1927-36	AB, AL, QL	Own	6	S126 卐AS730 S660 S711	V126	G210	G209
				⅛" O. S. Head for S126 S126 with ½" Stem					

*Indicates $\frac{1}{64}$" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS130	VS391	R28												PB742	4
2	IS145	VS414	R149													
3	IS129															
4																
5	IS136	VS359	R28								P835	1.000	3 21/32	AP	PB729	6
6	IS130		R28			†C677(B)	4	4 11/32	2 13/32	3-3/16	P677	1.000	3 5/8	O		
7	IS129															
8																
9		VS420	R38			†C966	3 1/4	3 1/2	1 3/4	2-1/8, 1-3/16	P943	.875	2 11/32	F	PB751	4
10	IS104	VS343	R28			†C416	3 1/4	3 11/32	2 1/16	3-3/16	P295	.740	2 13/32	O		
11	IS104	VS343	R28			†C640(B)	3 1/2	3 11/32	2 1/16	3-3/16	P719	.740	3 3/16	O		
12	IS111	VS359	R28			†C640(B)	3 1/2	3 11/32	2 1/16	3-3/16	P719	.740	3 3/16	O		
13	IS145	VS414	R149	L621 Aerotype			3 5/8	4 5/8	2 13/32	3-1/8, 1-3/16	P948	1.000	3 1/16	F	PB729	6
14	IS104	VS343	R28			†C759	3 5/8	3 11/32	2 1/16	3-1/8, 1-3/16	P759	1.109	3 1/32	F	PB688	4
15	IS145	VS414	R149	†L605 Aerotype			3 3/4	4 5/8	2 13/32	3-1/8, 1-3/16	P939	1.000	3 11/32	F	PB729	6
16	IS111	VS359	R28			†C791	3 3/4	3 11/32	2 1/16	3-3/16	P791	.740	3 1/16	O		
						†C835	3 3/4	3 11/32	2 1/16	3-1/8, 1-3/16	P835	1.000	3 21/32	AP		
17						†C321	3 3/4	3 7/8	2 1/8	4-1/4	P169	1.000	3 1/2	S		
18	IS132	VS415 ♂ Exhaust VS416 ♂ Inlet-Outer VS417 ♂ Inlet-Inner	R147	†L568 Aerotype			4	4 1/2	2 13/32	3-1/8, 1-3/16	P876	1.000	3 29/32	AP	PB729	6
19	IS111	VS359	R28			†C819	4	4 5/8	2 13/32	3-3/16	P677	1.000	3 5/8	O		
	IS136			†L568 Aerotype			4	4 1/2	2 13/32	3-1/8, 1-3/16	P876	1.000	3 29/32	AP	PB729	6
20	IS130	VS295	R28			†C677(B)	4	4 11/32	2 13/32	3-3/16	P677	1.000	3 5/8	O		
21	IS130	VS373	R28			†C677(B)	4	4 11/32	2 13/32	3-3/16	P677	1.000	3 5/8	O		
22	IS140					†C453(B)	4	5 13/32	3 3/32	3-1/4	P571	1.250	3 3/4	O		
23	IS140					†C252(B)	4	5 3/16	3 3/16	3-1/4	P571	1.250	3 3/4	O		
24		VS391	R28	Sleeve Assembly SA46		†C979	4 1/8	4 7/8	2 13/32	4-3/16	P979	1.3125	3 7/8	S	PB742	4
25	IS106	VS373	R28			†C860(B)	4 1/8	4 5/8	2 13/32	3-1/8, 1-3/16	P677	1.000	3 5/8	O		
26	IS111	VS359	R28			†C808(B)	4 1/8	4 5/8	2 13/32	3-3/16	P677	1.000	3 5/8	O		
	IS136			†L570 Aerotype			4 1/8	4 1/2	2 13/32	3-1/8, 1-3/16	P878	.9995	3 29/32	AP	PB729	6
27	IS136	VS359	R28			C905(B)	4 1/4	4 5/8	2 13/32	3-1/8, 1-3/16	P677	1.000	3 5/8	O		
28						†C760(B)	4 1/4	4 11/32	2 13/32	3-1/8, 1-3/16	P760	1.000	3 7/8	O		
29	IS130	VS373	R28			†C760(B)	4 1/4	4 11/32	2 13/32	3-1/8, 1-3/16	P760	1.000	3 7/8	O		
30						†C545(B)	4 1/4	5 1/4	3 1/8	3-1/4	P111	1.250	3 3/4	O		
31	IS106	VS373	R28			†C782(B)	4 3/8	4 5/8	2 13/32	3-1/8, 1-3/16	P760	1.000	3 7/8	O	PB529	12
				†L620 Aerotype			4 3/8	5 5/32	2 13/32	3-1/8, 1-3/16	P947	1.375	4 1/4	AP	PB730	6
32	IS132			†L620 Aerotype			4 3/8	5 5/32	2 13/32	3-1/8, 1-3/16	P947	1.375	4 1/4	AP	PB730	6
33	IS140					†C454(B)	4 3/8	5 11/32	3 3/32	3-1/4	P112	1.250	3 3/4	O		
34	IS140					†C141(B)	4 3/8	5 11/32	3 3/16	3-1/4	P112	1.250	3 3/4	O		
35	IS121					†C723	4 1/2	5	2 17/32	3-1/8, 1-3/16	P723	1.375	3 7/8	O		

(B) = Piston is bushed.
S = Set Screw type piston pin.
† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.
O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES Exhaust	VALVES Intake	VALVE GUIDES Exh.	VALVE GUIDES Int.
1	WAUKESHA MTR.	1919-32	DU	Own	4	S126 卐AS730 S660 S711	V126	G210	G209
				1/8" O. S. Head for S126					
				S126 with 1/2" Stem					
2	WAUKESHA MTR.	1930-36	SRK	Own	6	S722 卐AS752	V723	G330	G331
3	WAUKESHA MTR.	1917-29	P, PM, PU4, PU7	Own	4	S127	V127	G211	G212
4	WAUKESHA MTR.	1928-36	RB	Own	6	S126 卐AS730 S660 S711	V126	G210	G209
				1/8" O. S. Head for S126					
				S126 with 1/2" Stem					
5	WAUKESHA MTR.	1919-32	EU	Own	4	S126 卐AS730 S660 S711	V126	G210	G209
				1/8" O. S. Head for S126					
				S126 with 1/2" Stem					
6	WAUKESHA MTR.	1926-30	GU	Own	4	S126 卐AS730 S660 S711	V126	G210	G209
				1/8" O. S. Head for S126					
				S126 with 1/2" Stem					
7	WAUKESHA MTR.	1927-36	JL	Own	4	S686	V686		
8	WEIDLEY MOTOR	1919-23	H	Own	4				
9	WEIDLEY MOTOR	1920-27	M	Own	4	S236 ♂Grooved Stem		G374	G374
				Drilled Stem		S292	V292		
10	WHITE	1937-38	700, 700A, 700H, 700K, 700P, 3/4-4T	250-21A	6	S1006 卐AS1007	V1008	G484	G484
11	WHITE	1937-38	710, 710A, 712, 712A, 718, 718A, 810, 812, 812A, 818, 818A, 918, 2-8T; 706M, Bus	318-16A	6	S784 卐AS785	V786	G465	G465
12	WHITE	1936-38	720T, 722, 920, 4 1/2-9T; 65A Bus	460-15A	6	S983 卐AS984	V985		
13	WHITE	1936-38	704K, 709, 709A, 809, 810, 1 1/2-6T; 706, 706M, Bus	303-13A	6	S784 卐AS785	V786	G465	G465
14	WHITE	1936-38	730, 730X, 731, 731H, 731X; 684, 686, Bus	505-12A	12	S954 ♂First 2 Lots AS1034 ♂Third lot and up	V955 V1035		
15	WHITE	1935-38	703, 704, 704A, 704K, 709, 709A, 805, 805A, 809, 809A, 904, 1 1/2-7T; 706, 706M, Bus	270-11A	6	S784 卐AS785	V786	G465	G465
16	WHITE	1935-38	730, 731, 3 1/2-8 1/2T; 684 Bus	10A, 10AB	12	S773 卐AS778	V671	G435	G436
17	WHITE	1935-38	712, 712A, 718, 718A, 3-5 1/2T 713 Bus	9A	6	卐AS759 ♂Taper Grooved Stem	V760	G427	G428
				Double Grooved Stem		S784 卐AS785	V786		
				Double Grooved Stem					
18	WHITE	1933-36	701, 702, 701A, 702A, 707	8A	6	S567 卐AS856	V568	G332	G332
19	WHITE	1934-38	620, 620K, 621, 621K, 630, 630K, 631, 631K, 631X, 632X, 630-SW320, 586GS, 720, 720A, 820, 2 1/2-11T; 65, Bus	434-7A	6	AS756 卐AS783	V757	G430	G431
20	WHITE	1934-37	685, 44 Pass. Bus	Own 6A	12	S954	V955		
21	WHITE	1933-37	640, 640K, 641, 641K, 642, 643, 691, 942, 991, 643SW420, 3-16 1/2T; 54, 54A Bus	Own 5A	6	卐AS728 ♂Salt Filled Stem	V729	G433	G434
				Single Groove Solid Stem		AS755 卐AS777			
				Single Groove Solid Stem					
				Double Groove Solid Stem		S1009 卐AS1010	V1011		
				Double Groove Solid Stem					

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	PISTONS SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS121					†C136(B)	4 1/2	5 3/8	3 5/8	3-3/4	P723	1.375	3 7/8	O		
2	IS106	VS373	R28	†L569 Aerotype			4 5/8	5 1/4	2 7/8	3-5/32, 1-3/16	P877	1.375	4 33/64	AP	PB730	6
3						†C144(B)	4 3/4	5 13/16	3 3/16	3-3/4	P113	1.500	3 31/32	O		
4	IS121					†C814(B) ♂ Offset Bosses.	5	5 5/8	3 23/32	4-3/16	P814	1.375	4 1/16	O		
5	IS121					†C145(B)	5	6 1/2	3 5/8	3-3/4	P159	1.375	4 1/16	O		
6	IS121					†C480(B)	5 5/8	6 3/32	3 11/32	4-3/4	P574	1.375	4 5/64	O		
7	IS129					†C846(B)	6	6 31/32	4 1/32	4-3/4	P846	1.625	5 1/4	O		
8						†C483	3 3/4	4 11/32	2 11/32	3-3/4	P577	1.000	3 1/4	F		
9			R138			†C462	4	4 1/2	2 5/8	4-3/4	P137	1.000	3 1/2	F		
10		VS418	R100			†C983	3 1/16	4 13/32	2 31/32	1-1/8, 1-5/32, 2-3/16	P983	1.000	3 1/32	F	PB759	6
11		VS418	R100			†C986	3 7/8	4 13/32	2 31/32	3-5/32, 1-3/16	P826	1.125	3 5/32	F	PB629	6
12			R159													
13		VS418	R100			†C886	3 31/32	4 13/32	2 31/32	3-5/32, 1-3/16	P826	1.125	3 5/32	F	PB629	6
14						†C967 Sleeve Assembly SA42	3 31/32	4 13/32	3 1/8	4-5/32, 1-3/16	P826	1.125	3 5/32	F	PB629	12
15		VS418	R100			†C887	3 1/16	4 13/32	2 31/32	3-5/32, 1-3/16	P732	1.125	3 1/32	F	PB629	6
16	IS165	VS418	R105			†C944	3 5/8	4 13/32	3 1/8	4-5/32, 1-3/16	P944	1.125	3 5/32	F	PB629	12
17		VS418	R105 R100			†C886	3 31/32	4 13/32	2 31/32	3-5/32, 1-3/16	P826	1.125	3 5/32	F	PB629	6
18	IS103	VS326	R107			†C836 C873 Same as C836 except has "T" Slot Skirt	3 1/16	3 7/8	2 31/32	3-1/8, 1-3/16	P836	1.000	2 31/32	F	PB717	6
19	IS130	VS406 ♂ Outer In. VS407	R106	†L555 Cam Ground Type L592 Same as L555 except relieved for round grinding.			4 3/16	5 1/16	2 27/32	2-5/32, 2-3/16	P702	1.187	3 5/8	F	PB607	6
20			R106													
21	IS130	VS244 ♂ Outer VS190 ♂ Inner	R106	L553 Cam Ground Type L591 Same as L553 except relieved for round grinding.			4 5/8	5 5/8	3 11/32	2-5/32, 2-3/16	P864	1.250	4 5/16	F	PB602	6
			R159	L600 Aerotype			4 5/8	5 31/32	3 11/32	2-5/32, 2-3/16	P864	1.250	4 5/16	F	PB602	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

(6-1-38)

Wh-Wi Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	WHITE	1930-36	61, 611, 612, 612K, 618, 618K, 1½-4T; 613 Bus	Own 4A	6	S670 卐AS782	V671	G367	G367
				*11/32" O. S. Stem		S773 卐AS778		G432	
				*11/32" O. S. Stem					
2	WHITE	1928-35	60, 60K, 61, 601, 602, 1-2T	2A	6	S635 ♂Square stem end S670 卐AS782	V636 V671	G367	G367
				Round Ball Stem End					
3	WHITE	1928-35	59, 64, 640, 641, 642, 642SW310, 642SW320, 643, 643SW410, 643SW420, 3-11T, 54, 54A, Bus	1A, 1AB	6	S622 ♂Salt Filled Stem S714 卐AS727	V623 V769	G226	G227
				Taper Grooved Stem					
				Taper Grooved Stem					
4	WHITE	1928-34	65, 620, 621, 630, 631	3A, 3AD	6	S637 ♂Solid Stem S665	V638		
				Salt Filled Stem					
5	WHITE	1927-34	161, 162, 211, 212	GRC, GRCB	4	S293	V294	G293	G292
6	WHITE	1926-35	51A, 58, 52, 55, 58SS	GRB	4	S243	V244	G293	G292
7	WHITE	1919-26	GR	GR	4	S154	V154	G207	G207
8	WHITE	1919-26	GO	GO	4	S154	V154	G207	G207
9	WHITE	1919-24	GMD, GN	GMD-GN	4	S155	V155	G219	G219
10	WHITE	1912-28	GK, GKD	GK-GKD	4	S153	V153	G167	G167
11	WILLYS	1937-38	37, 38	Own	4	S803	V804	G342	G343
12	WILLYS	1933-36	77	Own	4	S803	V804	G342	G343
13	WILLYS	1932	6-90	Own	6	S519	V520	G297	G297
14	WILLYS	1930-32	8-80, 8-80D, 8-88	Own	8	S519	V532	G297	G297
15	WILLYS	1930-31	98B, 6-97, 98D	Own	6	S519	V520	G297	G297
16	WILLYS TRUCK	1931-32	C113, C131, C157	Own	6	S519	V520	G297	G297
17	WILLYS KNIGHT	1931-33	95	Own	6				
18	WILLYS KNIGHT	1928-32	66A, 66B, 66D, 66E	Own	6				
19	WILLYS KNIGHT	1928-30	56, 70B	Own	6				
20	WILLYS KNIGHT	1927-28	70A	Own	6				
21	WILLYS KNIGHT	1926-27	66	Own	6				
22	WILLYS KNIGHT	1926	70	Own	6				
23	WILLYS KNIGHT	1920-25	61, 67, 64	Own	4				
24	WINDSOR	1929-30	8-82, 8-92, 8-85	Cont. 15S	8	S432	V433	G258	G258
25	WINDSOR	1929-30	6-72, 6-77, 6-75	Cont. 11E	6	S391	V392	G229	G229
26	WINTON MOTOR		120	Own	6	S693	S693		
27	WINTON MOTOR		148	Own	8	S694	S694		
28	WISCONSIN MTR.		B3	Own	4	S966	S966		
29	WISCONSIN MTR.		CA1	Own	4	S921	V921	G328	G328

*Indicates 1/32" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS STOCK NO. Alloy	Strut	Iron	SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS151	VS282	R105	L528 Aerotype			3¾	4¹¹⁄₁₆	2¹¹⁄₁₆	3-3/16, 1-5/16	P826	1.125	3⅝	F	PB629	6
	IS151	VS282	R105		†L497		3½	4⅞	2¹¹⁄₁₆	3-3/16, 1-5/16	P732	1.125	3⅝	F	PB629	6
3		VS244 ♂ Outer	R104 ♂ Exh.		†L511		4⅜	5¹¹⁄₁₆	3⅛	3-5/32, 1-5/16	P758	1.249	3¹¹⁄₁₆	F	PB602	6
	In. VS190		R77 ♂ Int.	†L536 Cam Ground Type			4⅜	5¹¹⁄₁₆	3⅛	2-5/32, 1-5/16	P758	1.249	3¹¹⁄₁₆	F	PB602	6
				L587 Same as L536 except relieved for round grinding.												
	Use with S714. AS727		R106	L599 Aerotype			4⅜	5¹³⁄₃₂	3⅛	3-5/32, 1-5/16	P758	1.249	3¹¹⁄₁₆	F	PB602	6
4	IS130	VS288 ♂ Outer VS289 ♂ Inner	R106	†L474 Cam Ground Type			4	5⅛	2¹¹⁄₁₆	4-5/16	P702	1.187	3⅝	F	PB607	6
				L579 Same as L474 except relieved for round grinding.												
				L630 Aerotype			4	5⅛	2¹¹⁄₁₆	4-5/16	P702	1.187	3⅝	F	PB607	6
5	IS111	VS194	R77	†L474 Cam Ground Type			4	5⅛	2¹¹⁄₁₆	4-5/16	P702	1.187	3⅝	F	PB607	4
				L579 Same as L474 except relieved for round grinding.												
				L630 Aerotype			4	5⅛	2¹¹⁄₁₆	4-5/16	P702	1.187	3⅝	F	PB607	4
6	IS117	VS194	R77		†L483		4¼	5¹¹⁄₁₆	2¹¹⁄₁₆	3-5/32, 1-5/16	P717	1.187	3¹¹⁄₁₆	F	PB620	4
				Skirt Ring		†C585	4¼	5¹¹⁄₁₆	2¹¹⁄₁₆	4-¼	P101	1.187	3¹¹⁄₁₆	S	PB620	4
						†C834	4¼	5¹¹⁄₁₆	2¹¹⁄₁₆	3-¼	P101	1.187	3¹¹⁄₁₆	S	PB620	4
7	IS118	VS192	R76			†C273	4¼	5⅛	2⅞	3-¼	P101	1.187	3¹¹⁄₁₆	S	PB519	4
	Old Style ♂		♂ Short Key													
		VS194	R112									.010 O.S. on O.D.			PB618	
	New Style ♂		♂ Long Key									.015 O.S. on O.D.			PB619	
8	IS118	VS192	R76			†C84	3¾	5¹¹⁄₁₆	2¹¹⁄₁₆	3-¼	P91	1.1875	3½	S		
	Old Style ♂		♂ Short Key													
		VS194	R112													
	New Style ♂		♂ Long Key													
9		VS195	R75			†C79	4¼	5⅛	2⅞	3-¼	P92	1.375	3⅞	S		
10	IS106	VS191	R76			†C35 (B)	3¾	4¹⁄₁₆	3⅛	3-¼	P021	1.047	3⅛	O	PB514	8
	Old Style ♂		♂ Short Key	Short Skirt		C547 (B)	3¾	4¹⁄₁₆	3⅛	3-¼	P021	1.047	3⅛	O	PB514	8
		VS193	R112			C40	3¾	4¹⁄₁₆	3⅛	3-5/16	P021	1.047	3⅛	O		
	New Style ♂		♂ Long Key			C488 (B)	3¾	4¹⁄₁₆	3⅛	3-5/16, 1-¼	P021	1.047	3⅛	O	PB514	8
11	IS143	VS286	R93			†C954	3⅛	3¾	2⅛	3-3/16, 1-5/16	P954	.9375	2¹¹⁄₁₆	F	PB698	4
12	IS146	VS286	R93			†C806	3⅛	3¾	2⅛	3-3/16, 1-5/16	P806	.875	2¹¹⁄₁₆	F	PB714	4
13	IS146	VS286	R93			†C771	3¼	3⅞	2¼	2-⅛, 1-5/16	P771	.9375	2¹¹⁄₁₆	F	PB698	6
14	IS146	VS286	R93			†C707	3⅛	3⅝	2	3-3/32, 1-5/16	P707	.797	2¹⁄₁₆	S	PB657	8
15	IS146	VS286	R93			†C698	3¼	3¹⁄₁₆	2¼	2-⅛, 1-5/16	P698	.797	2⅛	S	PB593	6
16	IS146	VS286	R93			†C698	3¼	3¹⁄₁₆	2¼	2-⅛, 1-5/16	P698	.797	2⅛	S	PB593	6
17					†L510		2¹⁄₁₆	3⅝	2	3-⅛, 1-3/32	P757	.797	2⅛	F	PB701	6
18					†L462		3⅜	4¼	2⅛	3-⅛, 1-5/16	P619	.874	3⅛	S		
19					†L407		2¹⁄₁₆	3⅝	2	4-⅛	P618	.797	2¾	S	PB593	6
20				†L384		C518	2¹⁄₁₆	3⅝	2	3-⅛	P384	.796	2⅝	O		
21				†L273 (B)			3¼	4⅜	1¹¹⁄₁₆	4-⅛	P273	.875	2¹¹⁄₁₆	O		
22				†L272			2¹⁄₁₆	3⅝	2	3-⅛	P272	.734	2¹¹⁄₁₆	O		
23				†L106 (B)			3⅝	4¾	2⅜	3-3/16, 1-5/16	P0106	.9365	3¼	O		
24	IS102 In.	VS202 VS255			†L399		3	3⅝	2⅛	3-3/16, 1-5/16	P615	.859	2¹¹⁄₁₆	F	PB634	8
25	IS135	VS231	R12		†L389	C596	3⅝	3¹⁄₁₆	2⅛	3-⅛, 1-3/32	P594	.859	2⅞	F	PB600	6
26																
27																
28				*Graphited Valve Guides do not require reaming*												
29															PB565	4

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Wi-Ye Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	WISCONSIN MTR.		J, JU, A	Own	4	S134	V134	G274	G274
2	WISCONSIN MTR.		EU, UU	Own	4	S132	V132		
3	WISCONSIN MTR.	1927-35	F	Own	6	S672	V672	G307	G307
4	WISCONSIN MTR.	1924-34	Y	Own	6	S255	V255	G328	G328
5	WISCONSIN MTR.	1927-34	H	Own	6	S291	V291	G380	G380
6	WISCONSIN MTR.	1922-34	SU	Own	4	S234	V234	G328	G328
				Long Stem ♂		♂ Short Stem S120	V120		
7	WISCONSIN MTR.	1918-27	TAU	Own	4	S132	V132		
8	WISCONSIN MTR.	1912-26	EAU	Own	4	S132	V132		
9	WISCONSIN MTR.		C1	Own	4	S120	V120	G328	G328
10	WISCONSIN MTR.	1923-24	UAU	Own	4	S132	V132		
11	WISCONSIN MTR.	1925-32	Z, X	Own	6	S644	V644		
12	WISCONSIN MTR.	1917-28	VAU	Own	4	S132	V132		
13	WISCONSIN MTR.		C2	Own	4	S921	V921	G328	G328
14	WISCONSIN MTR.	1917-26	RAU	Own	4	S133	V133		
15	WISCONSIN MTR.	1920-27	RBU	Own	4	S133	V133		
16	WOOD BROS. COMBINE		Prairie 10-12 Cut after Mtr. No. 162000	Buda WTU	4	S111	V111	G198	G198
17	WOOD BROS. COMBINE		Prairie 10-12 Cut to Mtr. 162000	Buda WTU	4	S111	V111	G198	G198
18	WOOD BROS. COMBINE		16 Cut	Buda KTU	4	S110	V110	G197	G197
19	WRIGHT AEROPL.		WW, J5	Own	9				
20	YELLOW COACH	1936-38	719, 720, 732, 735 740, 741, 742, 743, Z843, 1205 after Eng. No. 707-902	Own 707	6	卐AS972	V749	G474	G383
21	YELLOW COACH	1932-35	V634, V755, Z649, Z670, Z834, Z843, 718, 788, V818	Own 707	6	卐AS748	V749	G383	G383
22	YELLOW COACH	1937-38	739 after Eng. No. 1331-4478	Own 331	6	AS731 卐AS768	V732	G136	G137
23	YELLOW COACH	1934-36	U607, U662, U665, U769, U770, U771, U772 U785, 716, 723, Eng. 1331-2198 to 1331-4477	Own 331	6	AS731 卐AS768	V732	G136	G137
24	YELLOW COACH	1931-33	U605, U607, U612, U654, U662, U665 to Eng. 1331-2198	Own 331	6	*S437 AS853	*V438	G136	G137
				1 13/32" Head Diam.		卐AS880 AS725			
				1/8" O. S. Hd. for S437-V438		S488	V489		
25	YELLOW COACH	1936-37	733	Chev. 207	6	S858 卐AS896 S858AEX	V859 V859AIN	G371	G392
26	YELLOW COACH	1938	738, 739, 20-25 Pass.	Own 400	6	AS731 卐AS768	V732	G136	G137

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seat.

(6-1-38)

Line No.	Valve Seats	Valve Springs	Retainers	PISTONS — STOCK NO. Alloy	Strut	Iron	PISTONS — SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS Stock No.	No. Used
1	IS120															
2																
3	IS135					†C737	3¼	3¾	2	3-$\frac{3}{16}$	P737	.937	2$\frac{33}{64}$	WK	PB645	6
4	IS165	VS277	R87			†C366	3⅜	4	2	3-$\frac{3}{16}$	P255	1.0625	2$\frac{11}{16}$	WK	PB563	6
5	IS132	VS388	R139			†C635	4	4½	2¾	4-$\frac{3}{16}$	P637	1.1875	3$\frac{7}{16}$	WK	PB533	6
6	IS165	VS393				†C296	4	4¼	2⅛	3-$\frac{3}{16}$	P297	1.0625	3$\frac{7}{16}$	WK	PB565	4
7		VS276	R88			†C297	4	5$\frac{11}{16}$	2$\frac{11}{32}$	3-¼	P270	1.1875	3⅝	S	PB520	4
8		VS276	R88			†C414	4	4$\frac{31}{32}$	2$\frac{11}{32}$	3-¼	P270	1.1875	3⅝	S	PB533	4
9	IS165					†C925	4⅛	4$\frac{5}{32}$	2$\frac{1}{32}$	3-$\frac{3}{16}$	P297	1.0625	3$\frac{7}{16}$	WK	PB565	4
10	IS140	VS276	R88			†C362	4¼	5⅛	2$\frac{1}{16}$	3-¼	P101	1.1875	3$\frac{31}{32}$	S	PB520	4
11		VS396 ♂Outer In. VS397				†C431	4½	4¾	2¾	4-$\frac{3}{16}$	P722	1.187	3$\frac{13}{32}$	WK	PB520	6
12		VS276	R88			†C459	4½	4$\frac{11}{16}$	2⅛	3-¼	P268	1.1875	3$\frac{15}{16}$	S	PB520	4
13						†C926	4½	5$\frac{11}{32}$	2$\frac{11}{32}$	3-¼	P722	1.187	3$\frac{13}{32}$	WK	PB520	4
14						†C357	4¾	6⅛	3⅛	3-¼	P554	1.375	4$\frac{1}{16}$	S		
15						†C292	5	5$\frac{13}{32}$	2$\frac{13}{32}$	3-¼	P587	1.375	4$\frac{7}{16}$	S		
16	IS165	VS106	R7			†C927	3¾	4½	2$\frac{1}{16}$	4-$\frac{3}{16}$	P721	1.375	3	F	PB589	4
17	IS165	VS106	R7			†C272	3¾	4½	2$\frac{1}{16}$	4-$\frac{3}{16}$	P079	1.0625	3$\frac{7}{32}$	S	PB515	4
18	IS132	VS256	R7			†C425	4	5	2½	4-¼	P326	1.0625	3⅜	S	PB515	4
19				†L431			4½	3$\frac{7}{32}$	1¾	4-⅜	P630	1.180	4$\frac{1}{16}$	F		
20		VS341 ♂Outer VS342 ♂Inner		†L609 Aerotype ♂Concave Head			5	5$\frac{1}{32}$	2$\frac{17}{32}$	3-⅛, 1-$\frac{3}{16}$	P940	1.375	4$\frac{15}{32}$	F	PB750	6
				†L610 Aerotype ♂Flat Head High Compression			5	5$\frac{1}{32}$	2$\frac{17}{32}$	3-⅛, 1-$\frac{3}{16}$	P940	1.375	4$\frac{15}{32}$	F	PB750	6
21	IS115	VS341 ♂Outer VS342 ♂Inner		†L609 Aerotype ♂Concave Head			5	5$\frac{1}{32}$	2$\frac{17}{32}$	3-⅛, 1-$\frac{3}{16}$	P940	1.375	4$\frac{15}{32}$	F	PB750	6
				†L610 Aerotype ♂Flat Head High Compression.			5	5$\frac{1}{32}$	2$\frac{17}{32}$	3-⅛, 1-$\frac{3}{16}$	P940	1.375	4$\frac{15}{32}$	F	PB750	6
22	IS113	VS169 ♂Outer In. VS140 Lift. VS196	R125	†L627 Aerotype			3¾	4$\frac{11}{16}$	2$\frac{11}{16}$	3-⅛, 1-$\frac{3}{16}$	P965	1.125	3¼	F	PB756	6
23	IS113	VS169 ♂Outer In. VS140	R5	†L559 Aerotype			3¾	4¼	2$\frac{7}{16}$	3-⅛, 1-$\frac{3}{16}$	P684 ♂For rods with $\frac{5}{16}$" lock screws	.9375	3$\frac{3}{32}$	O		
											P933 ♂For rod with ⅜" lock screws	.9375	3$\frac{3}{32}$	O		
24	IS113	VS169 ♂Outer VS140 ♂Inner Lift. VS196	R5	†L525 Aerotype			3¾	4$\frac{1}{16}$	2$\frac{11}{16}$	3-⅛, 1-$\frac{3}{16}$	P684	.9375	3$\frac{3}{32}$	O		
						C684(B)	3¾	4$\frac{1}{16}$	2¼	2-⅛, 1-$\frac{3}{16}$	P684	.9375	3$\frac{3}{32}$	O	PB650	12
				L559 Aerotype ♂High Compression			3¾	4¼	2$\frac{7}{16}$	3-⅛, 1-$\frac{3}{16}$	♂For rods with $\frac{5}{16}$" lock screws					
											P933 ♂For rods with ⅜" lock screws	.9375	3$\frac{3}{32}$	O		
25		VS328	R119	Tin Plated		C900(B)	3$\frac{15}{16}$	3$\frac{11}{16}$	1⅞	2-⅛, 1-$\frac{3}{16}$	P650	.990	2$\frac{39}{64}$	O	PB623	12
						C850(B)	3$\frac{15}{16}$	3$\frac{11}{16}$	1⅞	2-⅛, 1-$\frac{3}{16}$	P650	.990	2$\frac{39}{64}$	O	PB623	12
						♂Cam ground type—Not plated										
26		VS169 ♂Outer In. VS140	R5	†L653 Aerotype			4⅛	4⅝	2$\frac{11}{16}$	3-⅛, 1-$\frac{3}{16}$	P990	1.250	3$\frac{17}{64}$	F	PB732	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Ye-Ye Motor Parts

Line No.	MAKE	YEARS	MODEL	MOTOR	No. of Cyls.	VALVES		VALVE GUIDES	
						Exhaust	Intake	Exh.	Int.
1	YELLOW COACH	1935-37	U764, 716, 717, 722, 738 after Eng. No. 1400-756	Own 400	6	AS731 卐AS768	V732	G136	G137
2	YELLOW COACH	1932-35	U754, U760, U764, 711, 716, 717, 722 to Eng. No. 1400-756	Own 400	6	AS731 卐AS768	V732	G136	G137
3	YELLOW COACH	1934-37	717, 719, 721, 724, 725, 727, 728, 729, 731, 734	Own 450	6	AS731 卐AS768	V732	G136	G137
4	YELLOW COACH	1933-37	709, 712 714, 715	Own 257	6	S436 AS739 S487 卐AS909	V436	G132	G133
			⅛" O. S. Hd. for S436☞ Used with Replacement head with Stellite Seats☞						
5	YELLOW COACH	1930-35	V634, V674, V755, V845, V820, M704, M705, M708, Z376, Z610, Z614, Z617, Z619, Z620, Z621, Z623, Z626, Z630, Z633, Z649, 718, 720, 788	Own 616	6	S683 ♂2 7/32" Head Diam. S689 ♂Factory Duplicate 卐AS734	V684 V690	G383	G383
			2 3/4" Head Diam.☞ 2 3/4" Head Diam.☞						
6	YELLOW COACH	1931-35	V634 V674, V755, V636, V652	Own 468-525	6	S708 卐AS741	V709	G383	G383
7	YELLOW COACH	1930-34	W365, W366, W603, W661, W663	Cad. 353	8	S386 AS857	V387	G271	G271
8	YELLOW COACH	1929-31	U605, U607, U612, W372, W373, W374	Buick	6	*S437 AS853 卐AS880 S488	*V438 V489	G136	G137
			⅛" O. H. Hd. for S437-V438☞						
9	YELLOW COACH	1928-29	WA329, WC331	Cad. 341	8	S386 AS857	V387	G271	G271
10	YELLOW COACH	1924-27	Z199, Z200, Z201, Z209, Z210	Own	6	Sleeve Valve			

*Indicates 1/64" oversize stem valve also carried.

卐 Indicates Aerotype Valve with Stellite Seats.

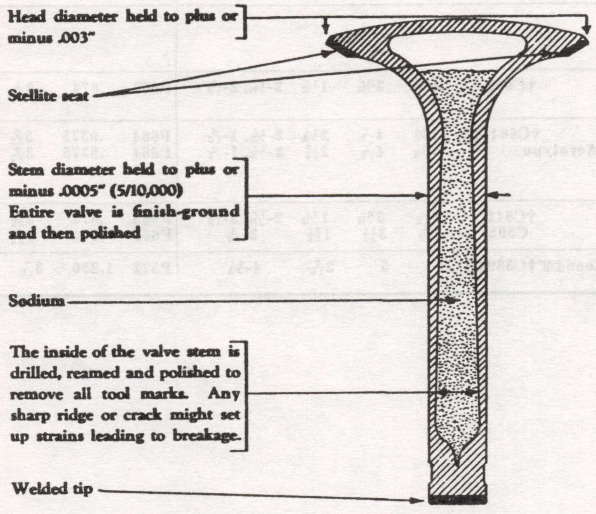
Line No.	Valve Seats	Valve Springs	Retainers	PISTONS — STOCK NO. Alloy	Strut	Iron	PISTONS — SPECIFICATIONS Diam.	Lgth.	Comp.	Rings Used	PISTON PINS — Stock No.	Diam.	Lgth.	Type	PIN BUSHINGS — Stock No.	No. Used
1		VS169 ♂ Outer In. ☞ VS140	R125	†L596		Aerotype	4 1/8	4 3/8	2 13/32	3-1/8, 1-1 3/16	P847	1.250	3 21/32	F	PB732	6
2		VS169 ♂ Outer In. ☞ VS140	R5	†L544		Aerotype	4 1/8	4 5/16	2 11/32	3-1/8, 1-1 3/16	P847	1.250	3 21/32	F	PB732	6
3	IS113	VS169 ♂ Outer In. ☞ VS140	R5	†L622		Aerotype	4 3/8	4 23/32	2 11/32	3-1/8, 2-1 3/16	P949	1.375	3 27/32	F	PB752	6
4	IS112	VS169 ♂ Outer In. ☞ VS140 Lift. ☞ VS196	R5	†L602 †C869 (B) L629		Aerotype Aerotype	3 7/16 3 7/16 3 7/16	4 1/8 4 1/8 4 1/8	2 1/2 2 1/2 2 1/2	3-1/8, 1-1 3/16 2-1/8, 1-1 3/16 3-1/8, 1-1 3/16	P936 P683 ♂ For rods with 5/16" lock screws P951 ♂ For rods with 3/8" lock screws	.9375 .875 .875	2 31/32 2 31/32 2 31/32	F O O	PB748 PB527	6 12
5	IS116	VS341 ♂ Outer VS342 ♂ Inner		†L518		Aerotype	4 7/8	5 3/32	2 25/32	3-1/8, 1-1 3/16	P772	1.375	4 11/32	F	PB669	6
6		VS341 ♂ Outer In. ☞ VS342														
7	IS126	VS184	R9			†C692	3 3/8	3 3/8	1 1/2	2-1/8, 2-1 3/16	P663	.874	3 1/32	S	PB597	8
8	IS113	VS169 ♂ Outer In. ☞ VS140 Lift. ☞ VS196	R5	L525		†C684 (B) Aerotype	3 3/4 3 3/4	4 1/16 4 1/16	2 1/4 2 1/4	2-1/8, 1-1 3/16 3-1/8, 1-1 3/16	P684 P684	.9375 .9375	3 9/32 3 9/32	O O	PB650	12
9	IS126	VS184	R9			†C841 C595	3 5/16 3 5/16	3 3/8 3 11/32	1 1/2 1 31/64	2-1/8, 2-1 3/16 3-3/16	P663 P663	.874 .874	3 1/32 3 1/32	S S	PB598 PB598	8 8
10				Concave Head ☞		†C589 (B)	4	5	2 7/16	4-1/4	P572	1.250	3 7/16	O	PB575	6

(B) = Piston is bushed.
S = Set Screw type piston pin.

† = Type of piston used as original equipment.
F = Full Floating type piston pin.
AP = Aluminum plugged piston pin.

O = Oscillating type piston pin.
WK = Woodruff Key type piston pin.

Thompson Exhaust Valve for Wright "Cyclone" Engine



The hollow stem is 60% filled with chemically pure sodium for conducting heat from the head, down the stem and into the guides. Sodium has the consistency of butter when "cool" and becomes liquid at about 200° F., "splashing" the inside surface with the motion of the valve. This serves to dissipate the heat from the head of the valve.

Stellite is welded to the seat for greater resistance to heat, corrosion, pitting and wear. The welded tip also resists wear to a greater degree than the body steel of the valve. The stem is nitrided for longer wear in the guides.

•

Thompson Products, Inc.
Cleveland, Ohio

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings		Packing Nuts	Packing Unit Package	Packing Rings per Pkg.
	ALLIS CHALMERS									
1933-37	W, WC; W25 Power Unit			PS183	PL167	PB238	PB239	Seal Assy. ☞PK314		
1933-37	M (1933-37) U, UC (1935-37)			PS181	PL166	PB236	PB237	Seal Assy. ☞PK309		
	AUBURN									
1934-36	652, 653, 654, 850, 851, 852			PS152	PL142	Brg. Used		Seal Assy. ☞PK302		
1932-34	160, 160A, 165, 12-50, 12 Cyl.			PS87		Brg. Used		PN78	PK112	2
1930-33	895, 898, 898A, 8-100, 8-100A, 8-101, 8-105.		PA32	PS8	PL7	PB24		PN12	PK119	2
1929-30	125, 120 Aft. Eng. 24767			PS8	PL74	PB24		PN12	PK119	2
1928-29	120 To Eng. 24767		PA32	PS8	PL7	PB24		PN12	PK119	2
1927-28	8-77, 8-90, 8-115		PA32	PS8	PL7	PB24		PN12	PK119	2
1927-28	8-88 After Eng. 7129		PA32	PS8	PL7	PB24		PN12	PK119	2
1925-26	8-88 to Eng. 7129			PS76	PL68	PB24	PB127	PN12R PN70L	PK111	6
1927	6-66A			PS60	PL56	Brg.	PB109	PN38	PK121	2
1926-30	6-66 After Eng. 6339, 676, 680, 685		PA32	PS8	PL7	PB24		PN12	PK119	2
1925-26	6-66 To Eng. 6339			PS8		PB24		PN12	PK119	2
	AUTOCAR TRUCK									
1920-30	H, K, M, 26, 27			PS91	PL88			PN81R PN82L	PK114	2
	BUDA MOTOR									
	CS, DS, DW, HS, 6 Cyl., (Straight Bore Pulley)			PS106	PL103	Brg.	PB159	PN90	PK182	3
	BUICK									
1937-38	37-40, 38-40	WS37	PA144			PB248	PB249	Seal Assy. ☞PK312		
1937-38	37-60, 37-80, 37-90, 38-60, 38-80, 38-90	WS38	PA145			PB248	PB249	Seal Assy. ☞PK312		
1936	36-60, 36-80, 36-90	WS36	PA131			Brg.	PB219	PN126	PK213	
1935-36	35-40, 36-40 (Plain Shaft)	WS35	PA125			PB209	PB210	PN120	PK208	2
1934-35	34-40, 35-40 (Threaded Shaft)	WS20	PA106			PB209	PB210	PN120	PK208	2
		THOMPSON PACKLESS PUMP—WP956								
1933-35	60, 80, 90, 8 Cyl.			PS89	PL6	PB23	PB22	PN11	PK122	3
1933-35	33-50, 34-50, 35-50, 8 Cyl.	WS19		PS88	PL9	PB149	PB40	PN11	PK122	3
1931-32	8-50, 32-50, 8 Cyl.			PS13	PL9	PB39	PB40	PN11	PK122	3
1931-32	60, 80, 90, 8 Cyl.	WS12	PA48	PS7	PL6	PB23	PB22	PN11	PK122	3
					Thrust Washer ☞PB301					
1926-30	All Standard Six After Eng. 1560736; Master Six After Eng. 1539339	WS12	PA48	PS7	PL6	PB23	PB22	PN11	PK122	3
					Thrust Washer ☞PB301					
1926	Master Six to Eng. 1539339			PS14	PL10	PB23	PB22	PN11	PK122	3
1926	Standard Six to Eng. 1560736			PS7	PL15	PB23	PB22	PN11	PK122	3
		THOMPSON PACKLESS PUMP—WP915								
1925	Standard Six			PS55	PL48	PB104	PB104	PN56R PN53L	PK118	4
1924-25	41 to 55, Master Six			PS51	PL45	PB121	PB122	PN56R PN53L	PK118	4
	CADILLAC									
1938	3860S, 3865, 3875		PA149							
1937	60, 65, 70, 75, 8 Cyl.	WS63	PA149		Center ☞PB223				PK214	
					Gland Inner ☞PB224 (2 used)					
					Gland Outer ☞PB225					
1936	36-60, 36-70, 36-75, 8 Cyl.		PA134		Center ☞PB223				PK214	
					Gland Inner ☞PB224 (2 used)					
					Gland Outer ☞PB225					
1927-35	314 After Eng. 1-41000, 341, 353, 355, B, C, D		PA43			PB73 (Cover) PB74 (Body) PB75 (Lining)		PN5	PK124	3
1926-27	314 Eng. 1-21001 to 1-41000			PS94	PL92			PN85	PK124	3

Ch-Ch Alphabetical List—Water Pump Parts

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings		Packing Nuts	Packing	
									Unit Package	Rings per Pkg.
	CHANDLER									
1927-29	8-75, 8-85, Royal 8			PS72	PL63	Brg.	PB119	PN68	PK128	2
1927-29	Standard 31, 131, 132, 65		PA65	PS67		PB112	PB113	PN64	PK127	2
1927	Special Six, 43					PB112	PB113	PN64		
1923-29	32, 32A, 33, 33A, Big Six			PS71	PL62	PB117	PB118	PN64R PN66L	PK126	4
	CHEVROLET									
1938	HA, DeLuxe; HB, Master	WS64	PA181	PS206	PL178	PB272	PB273	Seal Assy. ☞PK313		
		THOMPSON PACKLESS PUMP—WP979 FACTORY TYPE PUMP—FP981								
1938	HC, ½T; HD, ¾T; HE, 1T; TA, TB, TC, TD, 1½T	WS64	PA181	PS206	PL178	PB272	PB273	Seal Assy. ☞ PK313		
		THOMPSON PACKLESS PUMP—WP979 FACTORY TYPE PUMP—FP981								
1937	Master GA, GB, Pass. Car, GC, SA, SB, SC, SD, ½-1½T.	WS31	PA148	PS188	PL178	PB255	PB256	Seal Assy. ☞PK313		
		THOMPSON PACKLESS PUMP—WP976 FACTORY TYPE PUMP—FP978								
1936	Master FA, FD, Std. FC, Truck FB, R	WS30	PA135	PS146	PL161	PB80	PB7	PN4	PK102	6
		THOMPSON PACKLESS PUMP—WP971 FACTORY TYPE PUMP—FP972						Includes Spacer ☞PK202	2	
1935	Master EA, ED, Std. EC, Truck EB, Q	WS17	PA119	PS146	PL152	PB80	PB7	PN4	PK102	6
		THOMPSON PACKLESS PUMP—WP947 FACTORY TYPE PUMP—FP964						Includes Spacer ☞PK202	2	
1933-34	CC, DC, Standard	WS14	PA88	PS146	PL137	PB80	PB7	PN4	PK102	6
		THOMPSON PACKLESS PUMP—WP933 FACTORY TYPE PUMP—FP963						Includes Spacer ☞PK202	2	
1933-34	CA, DA, Master CB, DB, O, P	WS5	PA5	PS146	PL136	PB80	PB7	PN4	PK102	6
		THOMPSON PACKLESS PUMP—WP901 FACTORY TYPE PUMP—FP962						Includes Spacer ☞PK202	2	
1929-32	All Six Cyl.	WS5	PA5	PS146	PL136	PB80	PB7	PN4	PK102	6
		THOMPSON PACKLESS PUMP—WP901 FACTORY TYPE PUMP—FP962						Includes Spacer ☞PK202	2	
1927-28	AB, LM, LO, LP, V, X, After 2252176			PS1	PL1	PB8	PB9	PN2	PK106	2
1926-27	AA, Sup., V. X. to 2252176			PS2	PL1	PB8	PB9	PN2	PK106	2
1914-26	All Four Cyl.			PS2	PL1		PB10	PN7	PK109	2
	CHRYSLER									
1938	C19 Imperial, C20 Custom	WS65		PS208	PL189			Seal Assy. ☞PK323		
				♂Shaft and Bearing						
1936-38	C7, C16, C18, Six	WS15	PA92 PA89	PS100	PL128	PB186 PB303	PB187		PK300	
			♂Includes Seal Assembly			♂Thrust Washer			♂Seal Assy.	
		THOMPSON PACKLESS PUMP—WP953								
1934-37	CU, CV, C1, C2, C3, C9, C10, C11, C17 8 Cyl.	WS21	PA105	PS153	PL144	PB186	PB208		PK300	
			♂Includes Seal Assembly			PB303 ♂Thrust Washer			♂Seal Assy.	
1934-37	CA, CB, C6, 6 Cyl. CZ, C8, C14, C15 8 Cyl.	WS15	PA92 PA89	PS100	PL128	PB186 PB303	PB187		PK300	
			♂Includes Seal Assembly			♂Thrust Washer			♂Seal Assy.	
1933	Royal CT, Imperial CQ, 8 Cyl.		PA87			Brg.	PB37	PN16	PK134	2
			Rear Bushing & Retainer Assy. ☞PB38 Packing Gland ☞PB218							
1933	CO, Six	WS62	PA73			PB2	PB3	PN2	PK104	2
			Rear Bushing & Retainer Assy. ☞PB62							
1932-33	Imperial 8, CH, CL		PA75			Brg.	PB152	PN16	PK134	2
			Rear Bushing & Retainer Assy. ☞PB153 Packing Gland ☞PB218							
1931-32	CD DeLuxe, CP, 8 Cyl.		PA54	PS12	PL14	Brg.	PB37	PN16	PK134	2
			Rear Bushing & Retainer Assy. ☞PB38							
1931	Imperial 8, CG		PA61			Brg.	PB5			
			Rear Bushing & Retainer Assy. ☞PB64							
1930-32	CD, Eight, CI, Six		PA11	PS31	PL27	PB2	PB3	PN2	PK104	2
			Rear Bushing & Retainer Assy. ☞PB62							
1931-32	CM, Six	WS4	PA3	PS29	PL27	PB2	PB3	PN2	PK104	2
			Rear Bushing & Retainer Assy. ☞PB62							

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings		Packing Nuts	Packing	
									Unit Package	Rings per Pkg.
	CHRYSLER (Cont'd)									
1930-31	CJ, Six	WS4	PA3	PS29	PL27	PB2	PB3	PN2	PK104	2
			Rear Bushing & Retainer Assy. ☞ PB62							
		THOMPSON PACKLESS PUMP—WP905								
1930	70 after car 7996001		PA76			Brg.	PB5	PN3	PK134	2
			Rear Bushing & Retainer Assy. ☞ PB64							
1930	70 to car 7996001, 77		PA51	PS35	PL31	PB2	PB3	PN2	PK104	2
			Rear Bushing & Retainer Assy. ☞ PB62							
1929-30	Imperial 80L after car EP122S			PS65	PL59	Brg.	PB36	PN17	PK172	2
1929	75		PA15	PS28	PL26	Brg.	PB36	PN17	PK172	2
1928-29	Imperial 80L to car E122S			PS65	PL59	Brg.	PB28	PN17	PK172	2
1928-30	62 after car LR208, 65, 66, 70 to car P117PY	WS10	PA18	PS30	PL29	PB41	PB42	PN19	PK108	2
			Rear Bushing & Retainer Assy. ☞ PB58							
1926-27	Imperial 80			PS64	PL59	Brg.	PB28	PN17	PK172	2
1926-28	60, 62 to car LR208, 70, 72	WS8	PA15	PS28	PL26	Brg.	PB28	PN17	PK172	2
1924-26	B, 70		PA17	PS36	PL33	Brg.	PB28	PN17	PK172	2
	CLEVELAND									
1925-26	31, Light Six		PA65	PS67		PB112	PB113	PN64	PK127	2
1925-26	43, Six Cyl.					PB112	PB113	PN64	PK127	2
	CONTINENTAL									
	C400, 4 Cyl., C600, 6 Cyl.			PS40	PL35		PB197	PN27	PK144	2
						Gland ☞ PB198				
	H2 to No. 188, H9, 4 Cyl.				PL35			PN38R	PK179	3
									♂2 Required	
	P20, P20A to No. 142, 4 Cyl.				PL35			PN38R	PK179	3
	H2 No. 189 to 783, H7, H9, P20, P20A, No. 142 to 3641, 4 Cyl.							PN38R	PK179	3
	R800, 8 Cyl.			PS74	PL96		PB125	PN67	PK171	2
	W4, H8, 4 Cyl. (4 7/8" Shaft)			PS38	PL35		PB81	PN38	PK179	3
	W5, H6, H8, (5 1/2" Shaft) 4 Cyl.			PS40	PL35		PB81	PN87	PK179	3
	W10 to No. 210, W8, W11, 22A, 4-6 Cyl.			PS104	PL97		PB81	PN38	PK121	2
	W10 after 210, W20, 4 Cyl.			PS104	PL97		PB81	PN38	PK106	
	6W to No. 236, 6 Cyl.			PS38			PB81	PN38	PK179	3
	6W No. 236 to No. 8950, 6 Cyl.						PB81	PN38	PK179	3
	6W after No. 8950, 6 Cyl.			PS103	PL104		PB81	PN38	PK179	3
	7U, 10U, 6 Cyl.			PS103						
	8 F after 30871, 9F after 142791			PS96	PL95	PB161	PB160		PK106	2
	9F to No. 142791			PS37	PL95		PB69		PK106	2
	9L, 18L, 19L, 20L, 26L, 28L, 29L, 37L			PS60	PL56		PB109	PN38	PK121	2
	10E, 12E, 15E, 8F to No. 30870			PS37	PL32		PB69	PN36	PK106	2
	11E to No. 4075, 16E to No. 27307, 18E to No. 3277, 14E			PS37	PL32		PB69	PN36	PK106	2
	11E after No. 4076, 18E after No. 3278			PS37				PN67	PK171	2
	12K, 13K, 15K, 8 Cyl.			PS73					PK133	2
	14C to No. 5199, 6 Cyl.			PS103	PL104		PB81	PN38	PK179	3
	14C No. 5200 to 5300 & 6017 to 7576				PL104		PB81		PK133	2
	14C No. 5301 to 6016			PS103	PL104		PB81		PK133	2
	14C No. 7576 to 10352						PB81		PK133	2
	14L, 15L, 18C			PS103	PL104		PB81	PN38	PK121	2
	14S, 8 Cyl.				PL56			PN38	PK132	2
	15C, 6 Cyl.			PS74			PB162	PN36	PK106	2
	15S to No. 2075				PL64		PB162	PN36	PK106	2

Co-Do Alphabetical List—Water Pump Parts

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings	Packing Nuts	Packing: Unit Package	Packing: Rings per Pkg.
	CONTINENTAL (Cont'd)								
	15S No. 2075 to 2739, 17S to 506 & 1001 to 1016, 21S 6666 to 7788			PS74	PL64		PN67	PK171	2
	15S No. 2739 to 2909, 17S 506 to 554 & 1017 to 2943			PS74	PL64		PN67	PK171	2
	15S No. 2909 to 4500			PS74	PL66	PB162	PN67	PK171	2
	15S No. 4500 to 6665				PL66	PB162	PN36	PK106	2
	15S No. 6665 to 7788			PS74	PL66		PN67	PK171	2
	15S after 7788, 17S after 2943			PS74	PL66	PB125	PN67	PK171	2
	15U to No. 4100			PS103	PL104	PB81	PN38	PK106	2
	15U after No. 4100				PL104	PB81	PN38	PK121	2
	16C to No. 5199, and 5301 to 6016			PS103	PL104	PB81 PB81	PN38	PK121	2
	16E after No. 27308			PS37			PN36	PK106	2
	16S to No. 28300					PB162	PN36	PK106	2
	16S after No. 28301				PL64		PN67	PK171	2
	17E, 19E, 28B, 6 Cyl.			PS104	PL97	PB81	PN87	PK106	2
	17S No. 554 to 1001			PS74	PL66		PN67	PK171	2
	21S to No. 4500, and after 7788			PS74	PL64	PB125	PN67	PK171	2
	21S No. 4500 to 6665				PL64	PB162	PN67		
	25A, 26B, 6 Cyl.			PS104			PN87	PK106	2
	30A, 6 cyl.			PS104	PL97	PB81	PN87	PK121	2
	30L, 31L, 32L, 34L				PL56	PB109	PN38		
	32A, 40A, 41A			PS104	PL97	PB81	PN38	PK179	3
	DE SOTO								
1937-38	S1, S3, S5, Six	WS15	PA92 PA89 ♂Includes Seal Assembly	PS100	PL128	PB186 PB303 ♂Thrust Washer	PB187	PK300 ♂Seal Assy.	
		THOMPSON PACKLESS PUMP—WP953							
1935	Airstream, SF, 6 Cyl.	WS15	PA92 PA89 ♂Includes Seal Assy.	PS100	PL128	PB186 PB303 ♂Thrust Washer	PB187	PK300 ♂Seal Assy.	
1936	Airflow, S2, 6 Cyl.	WS46	PA138 ♂Includes Seal Assy.	PS176	PL128	Brg. Used		PK300 ♂ Seal Assy.	
1934-35	SE, SG, Airflow, 6 Cyl.	WS21	PA105 ♂Includes Seal Assy.	PS153	PL144	PB186	PB208	Seal Assy. ☞PK300	
1933	SD., Six	WS62	PA73 Rear Bushing & Retainer Assy.			PB2	PB3 ☞PB62	PN2	PK104 2
1932	SC, Six		PA11 Rear Bushing & Retainer Assy.	PS31	PL27	PB2	PB3 ☞PB62	PN2	PK104 2
1929-31	CF, Eight, CK. SA, Six	WS4	PA3 Rear Bushing & Retainer Assy.	PS29	PL27	PB2	PB3 ☞PB62	PN2	PK104 2
		THOMPSON PACKLESS PUMP—WP905							
1929	K, Six	WS10	PA18 Rear Bushing & Retainer Assy.	PS30	PL29	PB41	PB42 ☞PB58	PN19	PK108 2
		THOMPSON PACKLESS PUMP—WP929							
	DODGE								
1935-38	DU, D2, D5, D8	WS15	PA92 PA89 ♂Includes Seal Assy.	PS100	PL128	PB186 PB303 ♂Thrust Washer	PB187	PK300 ♂Seal Assy.	
		THOMPSON PACKLESS PUMP—WP953							
1934	DR, DS, Six	WS15	PA92 PA89 ♂Includes Seal Assy.	PS100	PL128	PB186 PB303 ♂Thrust Washer	PB187	PK300 ♂Seal Assy.	
		THOMPSON PACKLESS PUMP—WP936							
1933	DP, DQ, Six	WS15	PA92 PA89 ♂Includes Seal Assy.	PS100	PL128	PB186 PB303 ♂Thrust Washer	PB187	PK300 ♂Seal Assy.	
		THOMPSON PACKLESS PUMP—WP921							
1933	DO, Eight		PA87 Rear Bushing & Retainer Ass			Brg Gla d	PB37 ☞PB38 ☞PB218	PN16	PK134 2

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings	Packing Nuts	Packing Unit Package	Packing Rings per Pkg.
	DODGE (Cont'd)								
1932	DK, Eight		PA54	PS12	PL14	Brg. PB37 Rear Bushing & Retainer Assy. ☞PB38 Gland ☞PB218	PN16	PK134	2
1932	DL, Six		PA10			PB2 PB3 Rear Bushing & Retainer Assy. ☞PB62	PN2	PK104	2
1931	DG, 8 after Eng. DG 5786		PA60	PS12	PL16	Brg. PB37 Rear Bushing & Retainer Assy. ☞PB38	PN16	PK134	2
1931	DG, 8 to Eng. DG 5786		PA11	PS31	PL27	PB2 PB3 Rear Bushing & Retainer Assy. ☞PB62	PN2	PK104	2
1931	DH, Six		PA9			PB2 PB3 Rear Bushing & Retainer Assy. ☞PB62	PN2	PK104	2
1930	DD, Six, DC. Eight	WS4	PA3	PS29	PL27	PB2 PB3 Rear Bushing & Retainer Assy. ☞PB62 THOMPSON PACKLESS PUMP—WP905	PN2	PK104	2
1930	DA, Six after DA9755		PA20	PS32	PL30	PB43 PB3 Rear Bushing & Retainer Assy. ☞PB62 THOMPSON PACKLESS PUMP—WP932	PN2	PK104	2
1929	DA, Six to DA9755		PA19	PS33	PL30	PB2 PB3 Rear Bushing & Retainer Assy. ☞PB62 THOMPSON PACKLESS PUMP—WP930	PN2	PK104	2
1928-29	*Victory, Standard, Six			PS3	PL2	Brg. PB11 THOMPSON PACKLESS PUMP—WP946	PN6	PK132	2
1928-30	Senior Six (3⅜" Bore)			PS27	PL25	Brg. PB60	PN27	PK133	2
1928	Senior Six (3¼" Bore)			PS21	PL25	Brg. PB59	PN26	PK106	2
1927-28	Four, 124, 128, 129, A890961 to A1019544		PA13			PB27	PN6	PK131	1
1926	Four, A681434 to A875380		PA14				PN61R PN62L	PK129	2
1926	Four, A518420 to A681434		PA49				PN61R PN62L	PK129	2
1914-26	Four, to A518420		PA53				PN57R PN58L	PK129	2
	DODGE TRUCK								
1938	RE15-16-17-20-21-22-30-31-32, ¾-1-1½T. to T40-15313; RF35-36-37, 1½T. to T41-19808; RG40-41-42-43, RH45-46-47-48, 1½-2T. to 6536	WS45	PA139	PS178	PL128	Brg. PB231 ♂Includes Seal Assy.	Seal Assy. ☞PK300		
1938	RE15-16-17-20-21-22-30-31-32 after Eng. T40-15318; RF35-36-37, RFD38, RF39, after Eng. T41-19809; RG40-41-42-43, RH45-46-47-48 after Eng. T42-6537			PS209	PL190	♂ Shaft and Bearing		PK323 ♂Seal Assy.	
1935-38	KC, KCL after D8048701 and LA9203901; LC, MC, MD15, MD16, MD20, MD21, MD22; RC, RD15, RD16, RD20, RD21. ½-¾-1T.	WS15	PA92 PA89	PS100	PL128	PB186 PB187 PB303 ♂Includes Seal Assy. ♂Thrust Washer THOMPSON PACKLESS PUMP—WP953		PK300 ♂Seal Assy.	
1936	LE15, LE16, LE17, LE20, LE21, LE22, LE30, LE31, LE32; LF28, LF35, LF36, LF37, ¾-1-1½T.	WS22	PA107	PS155	PL128	Brg. PB208 ♂Includes Seal Assy. THOMPSON PACKLESS PUMP—WP977		PK300 ♂Seal Assy.	
1936-37	LG, LH, ME, MF, MG, MH	WS45	PA139	PS178	PL128	Brg. PB231 ♂Includes Seal Assy.		PK300 ♂Seal Assy.	
1935-36	KH31V, KH32V, KH33V, K32V, K33V, K34V, KH16V, KH17V, KH18V, KH19V, KH21V, KH23V	WS22	PA107	PS155	PL128	Brg. PB208 ♂Includes Seal Assy. THOMPSON PACKLESS PUMP—WP977		PK300 ♂Seal Assy.	
1935-36	K45V, K46V, K47V, K48V K35V, K36V, K37V, K38V	WS23	PA108	PS156	PL144	Brg. PB208 ♂Includes Seal Assy. THOMPSON PACKLESS PUMP—WP944		PK300 ♂Seal Assy.	
1935-36	K60V, K61V, K62V		PA21			Brg. PB36	PN17	PK173	4
1934-35	KC, KCL to D8048700 and LA9203900	WS15	PA92 PA89	PS100	PL128	PB186 PB187 PB303 ♂Includes Seal Assy. ♂Thrust Washer THOMPSON PACKLESS PUMP—WP936		PK300 ♂Seal Assy.	
1934-35	K30-1-2-3-4, KH30-1-2-3, K20, K21	WS22	PA107	PS155	PL128	Brg. PB208 ♂Includes Seal Assy. THOMPSON PACKLESS PUMP—WP955		PK300 ♂ Seal Assy.	
1934-35	KH15-16-17-18-20-21-22-23	WS22	PA107	PS155	PL128	Brg. PB208 ♂Includes Seal Assy. THOMPSON PACKLESS PUMP—WP955		PK300 ♂ Seal Assy.	

Do-Fo Alphabetical List—Water Pump Parts

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings	Packing Nuts	Packing	
								Unit Package	Rings per Pkg.
	DODGE TRUCK (Cont'd)								
1934-35	K45-6-7-8, K35-6-7-8	WS23	PA108 ♂Includes Seal Assembly	PS156	PL144	Brg. PB208		PK300 ♂ Seal Assy.	
		THOMPSON PACKLESS PUMP—WP944							
1934-35	K50-1-2, K70-1-2		PA21			Brg. PB36	PN17	PK173	4
		THOMPSON PACKLESS PUMP—WP934							
1933-34	H22, H43, H44, 1½-2T.		PA96			PB36	PN17	PK172	2
		THOMPSON PACKLESS PUMP—WP943							
1932-33	HC, HCL	WS15	PA92 PA89 ♂Includes Seal Assy.	PS100	PL128	PB186 PB303 ♂Thrust Washer	PB187	PK300 ♂Seal Assy.	
		THOMPSON PACKLESS PUMP—WP921							
1932-34	G20-1, G30-1, after 8482340, H30-1, H20-1, 1-1½ Ton		PA97 ♂Includes Seal Assembly	PS144	PL128	PB186	PB187	PK300 ♂ Seal Assy.	
		THOMPSON PACKLESS PUMP—WP945							
1932-33	G80, G81, G82, 8 Cyl.		PA61 Rear Bushing & Retainer Assy.			PB5 ☞PB64	PN3	PK134	2
1931-33	UF10 after 24556, UG20, UG 21, UF30, UF31 after 63960, UG30, UG31, UG43, UG44		PA4 Rear Bushing & Retainer Assy.			PB4 PB5 ☞PB64	PN3	PK134	2
1930-32	G20, G21, F30, F31, G30, G31, to 8432341, G43, G44, GS55		PA17	PS36	PL33	PB36	PN17	PK172	2
		THOMPSON PACKLESS PUMP—WP974							
1931-34	F40-1-2, F60-1-2, 2-3T		PA21			Brg. PB36	PN17	PK173	4
		THOMPSON PACKLESS PUMP—WP934							
1930-31	UF10 to 24556, U124, U133, UF30, UF31 to 63960, F10, Merchant's Exp. after P7538	WS4	PA3 Rear Bushing & Retainer Assy.	PS29	PL27	PB2 PB3 ☞PB62	PN2	PK104	2
		THOMPSON PACKLESS PUMP—WP913							
1930-31	DA130, DA140, after D206480, E142623, S112856, F35, F36, DA120, DA124, DA133, 150, 165, 1-2T		PA22 Rear Bushing & Retainer Assy.	PS34	PL30	PB43 PB3 ☞PB62	PN2	PK104	2
1928-31	BE, DE, IE, LE, ME, SE, 130, 140, to D206480, E142623, S112856			PS3	PL2	PB11	PN6	PK132	2
		THOMPSON PACKLESS PUMP—WP946							
1928-31	GE, HE, OE, RE, TE, 150, 165, 130, 165, 185, 1½-3T, after D226952, E148301			PS27	PL25	PB60	PN27	PK133	2
1928-30	JD, JE, YD, YE, Bus			PS80	PL73	PB132	PN26	PK106	2
1928-29	Merchant's Exp. 109 to P3064	WS10	PA18 Rear Bushing & Retainer Assy.	PS30	PL29	PB41 PB42 ☞PB58	PN19	PK108	2
1927-29	ED, OD, TD, GE, HE, OE, TE to D226952, E148301, 135, 165, 185, JD, YD, 1½-3T.			PS21	PL25	PB59	PN26	PK106	2
1927	Four Cyl. A875380 to A890961					PB27	PN26		
1926	Four Cyl. A681434 to A875380		PA14				PN61R PN62L	PK129	2
1926	Four Cyl. A518420 to A681434		PA49				PN61R PN62L	PK129	2
1919-26	Four Cyl. All to A518420		PA53				PN57R PN58L	PK129	2
	ERSKINE								
1930	53		PA40	PS45	PL42	PB88 PB90 Center ☞PB89	PN24 PN44 Center ☞PN43	PK167	10
1929	52 after Eng. 9F-142790			PS96	PL95	PB161 PB160		PK136	7
1928-29	51, 52 to Eng. 9F-142790			PS37	PL95	PB69		PK106	2
1927	50			PS37	PL32	Brg. PB69	PN36	PK106	2
	FORD								
1938	82A, 60 H.P. (Right or Left)	WS72		PS190 ♂Shaft and Bearing	PL174	PB257		PK324	
		PK324 Consists of one each Inner Gasket, Outer Gasket, Impeller Spring, and Spring Retainer							
		FACTORY TYPE PUMP—FP983							
1937-38	78, 81A, 85 H.P. (Right or Left)	WS34	PA152	PS189	PL173	PB250	Seal Assy. ☞PK315		
		FACTORY TYPE PUMP—Right—FP984							
		FACTORY TYPE PUMP—Left—FP985							

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings	Packing Nuts	Packing	
								Unit Package	Rings per Pkg.
	FORD (Cont'd)								
1937	74, 60 H.P. (Right or Left)	WS33		PS190	PL174	PB257	PN136	PK316	
				♂Shaft and Bearing					
		PK316 Consists of Inner Gasket, Outer Gasket, Spring, and Spring Retainer.							
		FACTORY TYPE PUMP—FP982							
1933-36	All V8 (Right or Left)	WS66	PA162			PB155	PB155	PK315	
			♂Slotted Impeller with four straight vanes.					♂Seal Assy.	
		THOMPSON PACKLESS PUMP—WP941							
1935-36	40, 48, 68 (Right or Left)	WS32	PA140			PB155	PB155	Seal Assy. ☞PK301	
			♂Spiral Vane Impeller.						
		THOMPSON PACKLESS PUMP—WP941							
		FACTORY TYPE PUMP—FP986							
1933-35	40, 48 (Right or Left)	WS13	PA77			PB155	PB155	Seal Assy. ☞PK301	
			♂Straight Vane Impeller.						
		THOMPSON PACKLESS PUMP—WP941							
		FACTORY TYPE PUMP—FP969							
1932	18, V8 (Right or Left)	WS13	PA77			PB155	PB155	Seal Assy. ☞PK301	
		FACTORY TYPE PUMP—FP967							
1932	B, 4 Cyl.	WS3	PA2			Brg.	PB1	PN1 (Bronze) PN100 (Alum)	PK101 2
		THOMPSON PACKLESS PUMP—WP903							
		FACTORY TYPE PUMP—FP966							
1929-31	A (Without Oilers)	WS1	PA1			PB34	PB1	PN1 (Bronze) PN100 (Alum)	PK101 2
					Thrust Washer	☞PB300			
		THOMPSON PACKLESS PUMP—WP902							
		FACTORY TYPE PUMP—FP965							
1928-31	A (With Oilers)	WS2	PA1			Brg.	PB1	PN1 (Bronze) PN100 (Alum)	PK101 2
					Thrust Washer	☞PB300			
		THOMPSON PACKLESS PUMP—WP902							
		FACTORY TYPE PUMP—FP965							
	FORD TRUCK								
1938	82C, ½T; 82Y, 1T; 60 H.P. (Right or Left)	WS72		PS190	PL174	PB257		PK324	
				♂Shaft and Bearing					
		PK324 Consists of Inner Gasket, Outer Gasket, Impeller Spring, and Spring Retainer.							
		FACTORY TYPE PUMP—FP983							
1937-38	79, 81T, 81U, 817T, 1½T; 85 H.P. (Right or Left)	WS56		PS194	PL173			PK315	
				♂Shaft and Bearing				♂Seal Assy.	
		FACTORY TYPE PUMP—FP991 (Right Hand)							
		FACTORY TYPE PUMP—FP992 (Left Hand)							
1937	77, ½T. 85 H.P.	WS34	PA152	PS189	PL173	PB250		Seal Assy. PK315	
		FACTORY TYPE PUMP—Right—FP984							
		FACTORY TYPE PUMP—Left—FP985							
1937	73, ½T; 75, 1½T; 60 H.P.	WS33		PS190	PL174	PB257	PN136	PK316	
				♂Shaft and Bearing					
		PK316 Consists of Inner Gasket, Outer Gasket, Spring, and Spring Retainer.							
		FACTORY TYPE PUMP—FP982							
1935-36	51, 1½T. with Double Sheave Pulley—Bearing Type	WS67		PS193	PL179			PK318	
				♂Shaft and Bearing				♂Seal Assy.	
		THOMPSON PACKLESS PUMP—WP975							
		FACTORY TYPE PUMP—FP990							
1935-36	51, 1½T; with Single Sheave Pulley	WS18	PA121			PB155	PB155	Seal Assy. ☞PK301	
		THOMPSON PACKLESS PUMP—WP950							
		FACTORY TYPE PUMP—FP970							
1933-36	50, 67, ½T; BB, 1½T (Right or Left)	WS66	PA162			PB155	PB155	PK315	
			♂Slotted Impeller with four straight vanes					♂Seal Assy.	
		THOMPSON PACKLESS PUMP—WP941							
1933-36	50, 67, ½T; BB, 1½T (Right or Left)	WS32	PA140			PB155	PB155	Seal Assy. ☞PK301	
			♂Spiral Vane Impeller						
		THOMPSON PACKLESS PUMP—WP941							
		FACTORY TYPE PUMP—FP969							
1933-35	50, ½T; BB, 1½T (Right or Left)	WS13	PA77			PB155	PB155	PK301	
			♂Straight Vane Impeller					♂Seal Assy.	
		THOMPSON PACKLESS PUMP—WP941							
		FACTORY TYPE PUMP—PF969							
1933-34	46, ½T; BB4, 1½T. 4 Cyl.	WS16	PA95			Brg.	PB1	PN1 (Bronze) PN100 (Alum)	PK101 2
		THOMPSON PACKLESS PUMP—WP926							
		FACTORY TYPE PUMP—FP968							
1932	½T; BB, 1½T. 4 Cyl.	WS3	PA2			Brg.	PB1	PN1 (Bronze) PN100 (Alum)	PK101 2
		THOMPSON PACKLESS PUMP—WP903							
		FACTORY TYPE PUMP—FP966							
1929-31	½T; AA, 1½T (without oilers)	WS1	PA1			PB34	PB1	PN1 (Bronze) PN100 (Alum)	PK101 2
					Thrust Washer	☞PB300			
		THOMPSON PACKLESS PUMP—WP902							
		FACTORY TYPE PUMP—FP965							

Fo-Gr Alphabetical List—Water Pump Parts

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings		Packing Nuts	Packing Unit Package	Packing Rings per Pkg.
	FORD TRUCK (Cont'd)									
1928–31	½T; AA, 1½T (with oilers)	WS2	PA1			Brg. Thrust Washer	PB1 ☞PB300	PN1 (Bronze) PN100 (Alum)	PK101	2
	THOMPSON PACKLESS PUMP—WP902									
	FACTORY TYPE PUMP—FP965									
	FORDSON									
1930–34	All		PA70			PB131	PB130	PN72	PK112	2
1929	All		PA69			PB131	PB130	PN72	PK112	2
	G. M. C. TRUCK									
1938	T14, T145, T15, T155, ½-1½T (223 Motor)	WS73		PS191 ♂Shaft and Bearing	PL188				PK327 ♂Seal Assy.	
1937–38	T14, T16, T16H, F16, F16H, ½-1½T (230 Motor)	WS43		PS191 ♂Shaft and Bearing	PL175			Seal Assy. ☞PK320 By Pass Seal ☞PK326		
1935–38	T18, T18H, F18, F18H, T23, T23H, F23, F23H, T33, T33H, F33, F33H, T43, T46, T46H, F46, T51, T51H, T51W, T61, T61H, F61, F61H, T73, T73H, T74, T74H, T75, T75H, T75T, T78, T78T, T83, T84, T84SX, 1½-10T; Motors 221, 239, 257, 286, 331, 400, and 450								PK325 ♂Seal Assy.	
1936	T14, T16, T16H, ½-1½T (213 Motor) After Eng. F526847	WS42		PS173	PL150	PB232	PB49	PN111	PK198	2
1936	T14 to Eng. F526847	WS41		PS173	PL150	PB222	PB49	PN111	PK198	2
1935	T16, 1½T (213 Motor)			PS201 ♂Shaft and Fan Hub.	PL150	PB188	PB49	PN111	PK198	2
1934	T16, 1½ Ton (213 Motor)			PS201	PL143	PB188	PB49	PN111	PK198	2
1933–36	T61, T75, T75H, T75T, T78, T83, T84 (with pump at front, 400 Motor) T46, T46H, T51, T51H, T51W, T74, T74H, T75, T43T, T33, T33H (331 Motor)		PA118	PS158	PL145	Brg.	PB193	PN114	PK199	3
1932–33	T61, T83, T90, 400 Motor with pump on side; 7″ shaft		PA109	PS157	PL108	PB167	PB211	PN95	PK186	4
1932–34	T15, T18 to Serial 6050, T19, T23 to Serial 775, ½-2½T, 200 Mtr.	WS7	PA7			PB15	PB49	PN8	PK135	2
1931–34	T25, T26, T30, T31, T33, T42, T43, T44, T45, T73, T73H, 010, 257 Motor with down draft carburetor; T18, T23, T33L, with 221 Motor		PA94	PS142	PL133		PB193	PN114	PK199	3
1931–33	T51, T51H, T55, T60, T61, T82, T83, T90 after Eng. 1331000, 331 Motor with down draft carburetor; T83, T84, T90, 400 Motor with pump on side, 9 1/16″ shaft		PA83			PB167 Gland	PB168 ☞PB212	PN95	PK186	4
1929–31	T11, T15, T17, T18, T19, T34, Eng. 490159 to 729001	WS7	PA7			PB15	PB13	PN8	PK135	2
	THOMPSON PACKLESS PUMP—WP907									
1929	T11, T15, T17, T18, T19, T34 to Eng. 490158	WS7	PA7			PB15	PB13	PN8	PK135	2
	THOMPSON PACKLESS PUMP—WP906									
1928	T10, T11, T19, De Luxe Del. ½-1½T	WS6	PA6			PB14	PB13	PN8	PK135	2
1927–31	T20, T21, T25, T26, T30, T40, T42, T44, T50, T60, T80, T82, T90, 010, T51, T55, T61, T83, to Eng. 2568137; Buick Motor with up draft carburetor		PA48	PS7	PL6	PB23	PB22	PN11	PK122	3
	THOMPSON PACKLESS PUMP—WP915									
	GRAHAM									
1938	Std. & Spec. 96; Supercharger, and Custom 97			PS199 ♂Shaft and Bearing				Seal Assy. ☞PK328		
1937	95, 116, 120			PS199	PL184			Seal Assy. ☞PK317		
	PS199 Consists of Shaft and Bearing. PL184 Consists of Impeller and Seal Assembly									
1936	Crusader, 80 after Eng. 308875			PS187 ♂Shaft and Bearing	PL171	Brg. Used		Seal Assy. ☞PK308		
1936	Crusader 80 to Eng. 308875		PA141	PS179 ♂Shaft, Impeller, and Thrust Button	PL164		PB233	Seal Assy. ☞PK308		
1936	Cavalier 90, Supercharger 110				PL168	Brg. Used		Seal Assy. ☞PK307		

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings		Packing Nuts	Packing	
									Unit Package	Rings per Pkg.
	GRAHAM (Cont'd)									
1935	74, Standard Six			PS40	PL159	Gland ☞PB198	PB81	PN27	PK144	2
1935	72, Standard Eight			PS174	PL53	PB226	PB106			
1935	75, Supercharged Eight			PS172	PL53	PB226	PB106			
1935	73, Special Six			PS165	PL141	Brg.	PB207		PK303 ♂Seal Assy.	
1934	69, 71, Eight			PS154	PL53	PB226	PB106	PN59R PN60L	PK162	3
1934	68, Six Cyl.			PS150	PL141	PB206	PB207	Seal Assy. ☞PK303		
1930-33	Std. 6, 46, 53, 65, Prosperity 6, 56, Spec. 6, 45, 54, 58			PS56	PL51	PB226	PB106	PN59R PN60L	PK162	3
1930-31	Early Custom 8, 3 3/16" Bore			PS57	PL49	PB108				
1930-34	Spec. 8, 42, 820, Std. 8, 64, Custom 8, 822, 834, 57, Blue Streak 8, 49, 67			PS56	PL53	PB226	PB106	PN59R PN60L	PK162	3
	GRAHAM BRADLEY TRAC.									
1937-38	Standard, Row Crop			PS199	PL184			Seal Assy. ☞PK317		
	PS199 Consists of Shaft and Bearing. PL184 Consists of Impeller and Seal Assembly									
	GRAHAM PAIGE									
1928-29	610, 614, 612, 615			PS56	PL51	PB226	PB106	PN59R PN60L	PK162	3
1928-29	619, 629, 621			PS58	PL52	PB107		PN59R PN60L	PK162	3
1928-29	835, 827, 837			PS57	PL49	PB108				
	HERCULES MOTOR									
1931-36	JXA, JXB, JXC, JXD, 6 Cyl.			PS161	PL147		PB215	PN123	PK209	6
	O, OB, OBX, OX, OXA, Power Unit to 17421, 4 Cyl.				PL75			PN118R PN119L	PK187	3
	O, OB, OBX, OX, OXA, Power Unit after 17421, 4 Cyl.			PS81	PL75	PB133	PB133	PN118R PN119L	PK187	3
	OOA, OOB, OOC, 4 Cyl.				PL147 Gland ☞PB135	PB215	PB134 PB135	PN76R PN75L	PK209 ♂Front Rear ☞PK221	
	K, L, LC, LP, G, GC, GP, E, EP, to Eng. 75605					PB133	PB133	PN118R PN119L	PK187	3
	WXA, WXA2, WXB, WXC, WXC2, WXC3, WXE, WXG, WXLC, WX-LC3 Pumps with 10 1/2" shaft, grooved babbit lined bushings, bronze packing glands, and magneto.			PS82	PL76 Gland ☞PB135	PB134	PB134 PB135	PN76R PN75L	PK206	
	WXA, WXA2, WXB, WXC, WXC2, WXC3, WXE, WXG, WXLC, WX-LC3 Pumps with 10 1/2" shaft, plain bushings, steel ring packing glands, and magneto.			PS82	PL76	PB205	PB205	PN118R PN119L	PK187	3
	WXA, WXA2, WXB, WXC, WXC2, WXC3, WXE, WXG, WXLC, WX-LC3 Pumps with 7 1/8" shaft, one packing nut, and no magneto.			PS182	PL169 Gland ☞PB135	PB241		PN75	PK221	
	WXA, WXA2, WXB, WXC, WXC2, WXC3, WXE, WXG, WXLC, WX-LC3 Pumps with 7 1/4" shaft, 2 packing nuts, and no magneto.			PS186	PL76 Gland ☞PB135	PB134	PB247	PN76R PN75L	PK221	
	YXA, YXB, YXC, YXC2, YXC3, YXC4, YXD, RXB, RXC, Pumps with 15 3/4" shafts, grooved babbit lined bushings, bronze packing glands and magneto.			PS184	PL170 Gland ☞PB246	PB245	PB244 PB246	PN134R PN135L	PK222	

He-In Alphabetical List—Water Pump Parts

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings		Packing Nuts	Packing	
									Unit Package	Rings per Pkg.
	HERCULES MOTOR (Cont'd)									
	YXA, YXB, YXC, YXC2, YXC3, YXC4, YXD, RXB, RXC, Pumps with 15¾" shaft, plain bushings, steel ring packing glands, and magneto.			PS184	PL170	PB243	PB243	PN132R PN133L	PK218	
	YXA, YXB, YXC, YXC2, YXC3, YXC4, YXD, RXB, RXC Pumps with 11⅛" shaft and no magneto.			PS185	PL170 Gland ☞PB246	PB245	PB244	PN135	PK219	
	HUDSON									
1936-38	63, 64, 65, 66, 67, 73,74, 75, 76, 77, 83, 84, 85, 87, 6-8 Cyl.	WS51		PS175 ♂Shaft and fan hub	PL160	PB227	PB227		PK306 ♂Seal Assy.	
1935	GH, Big Six (For Production Type Pump)	WS50		PS168	PL153	PB240 Gland ☞PB151	PB72	PN34	PK125	1
1935	Spec. HT, DeLuxe HU, Custom HHU, 8 Cyl. (For Production Type Pump)	WS24		PS164	PL153	PB240 Gland ☞PB151	PB72	PN34	PK125	1
1934-35	All Models 6-8 Cyl. (For Replacement Type Pump)	WS52		PS175	PL172	PB227	PB227	Seal Assy. ☞PK306		
1934	LT, LL, LS, LU, 8 Cyl. (For Production Type Pump)	WS49		PS151	PL28	PB71 Gland ☞PB151	PB72	PN34	PK125	1
1933	E, Six cyl.	WS48		PS136	PL28	PB71 Gland ☞PB151	PB72	PN34	PK125	1
		THOMPSON PACKLESS PUMP—WP948								
1931-33	Greater 8 after Mtr. 43238, T, L			PS11	PL13	PB25	PB26	PN13	PK137	2
1931	Greater 8 Mtr. 32552 to 43238			PS9	PL13	PB25	PB26	PN13	PK137	2
1930	Great 8 to Mtr. 32552			PS9	PL8	PB25	PB26	PN13	PK137	2
1928-29	Super Six			PS50	PL44	PB96	PB97	PN47R PN48L	PK136	7
1924-27	Super Six			PS49	PL44	PB94	PB95	PN47R PN48L	PK136	7
	HUPMOBILE									
1935-36	518D, 618G, 6 Cyl.			PS171	PL158	Brg.	PB221	PN127	PK112	2
1935	521-O, 8 Cyl.		PA130			Brg. Used			PK304 ♂Seal Assy.	
1934-35	417W, 421J, 517W, 521J, 6 Cyl.			PS170	PL158	Brg.	PB221	PN127	PK112	2
1933-35	322F after 9149, 326L after 5849, 422F, 426I, 427T, 527T, 8 Cyl.		PA133			Brg. Used			PK304 ♂Seal Assy.	
1933-34	316, 321K, 321AK, 421K, 421AK, 6 Cyl.			PS43	PL139	PB83	PB84	PN40	PK141	2
		THOMPSON PACKLESS PUMP—WP912								
1932-33	222 after 7067, 226 after 5671, 322F to 8820, 326L to 5779, 8 Cyl.		PA74			Brg.	PB194			
1932	222 to 7067, 226 to 5671, 8 Cyl.		PA74			Brg.	PB150			
1931-32	Century Eight, L, 218		PA56			PB86	PB87		None Used	
1930-32	C, H, U, 8 cyl., 221, 225, 237		PA39			Brg.	PB85	PN41	PK142	2
1930-33	Century 6, S, S2, 216, 6 Cyl.,			PS43	PL38	PB83	PB84	PN40	PK141	2
1928-29	Century 6, A6			PS42	PL37	Brg.	PB82	PN39	PK163	2
		THOMPSON PACKLESS PUMP—WP911								
1925-27	A1 to A5, 6 Cyl.			PS41	PL36	Brg.	PB82	PN39	PK139	4
1925-29	E1, E2, E3, E4, Cen. 8, 125, M3			PS44	PL39		PB120		PK138	2
	INTERNATIONAL									
1937-38	D5, ½T.		PA173			PB195	PB196		PK321 ♂Seal Assy.	
1937-38	D2, D15, D30, ½-1½T. 6 Cyl.	WS77	PA167			PB270 Thrust Washer ☞PB304	PB271	PN138	PK101	2

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings		Packing Nuts	Packing Unit Package	Packing Rings per Pkg.
	INTERNATIONAL (Cont'd)									
1937-38	D300, DS300, 1½T.		PA171			PB270	PB271	PN138	PK101	2
						Thrust Washer ☞PB304				
1936-38	C50, C50T after Eng. 21344; C55, C55F, C55T, C60, C60T, after Eng. 2956; D50, D60, DR60, DR70, 3-5 T.		PA169			PB242	PB242	PN131	PK217	
1936-38	C35, C35T, CS35, CS35T, C40, C40F, C40T, 1½-3T; C35B, Bus after Eng. 37807; D35, DS35, D40	WS76	PA142			PB242	PB242	PN131	PK217	
						Thrust Washer ☞PB302				
1936-37	C300, 1½T.		PA165			Brg.	PB261	PN138	PK224	
1936	C1, C15, C30, CS30, after Eng. 29050; ½-1½ T.		PA168			Brg.	PB61	PN2	PK101	2
		THOMPSON PACKLESS PUMP—WP954								
1935-36	C35, C35T, CS35, CS35T, C40, C40F, C40T, 1½-3T. C35B Bus from Eng. 19201 to 37807			PS143	PL134	Brg.		PN88	PK201	2
		THOMPSON PACKLESS PUMP—WP952								
1934-36	C50, C50T to Eng. 21344; C55, C55F, C55T, C60, C60T to Eng. 2956; 3-5 Ton	WS75		PS98	PL99	Brg.	PB157	PN88	PK201	3
		THOMPSON PACKLESS PUMP—WP949								
1933-35	C1, D1, C15, C30, CS30, to Eng. 29050; ½-1½ Ton	WS25	PA28			Brg.	PB61	PN2	PK101	2
		THOMPSON PACKLESS PUMP—WP954								
1933-35	B3, B4, C35, C35T, CS35, CS35T, C40, C40F, C40T, 1½-3T; C35B Bus to Eng. 19201	WS74		PS143	PL134	Brg.	PB157	PN88	PK201	2
		THOMPSON PACKLESS PUMP—WP952								
1931-36	A1, A2, B2, M2, AW1, C10, AW2, C20, ¾-1½ T. 4 Cyl.		PA98	PS145	PL135	PB195	PB196		Seal	
		♂PA98 used on pumps with fan hub keyed to shaft								
		THOMPSON PACKLESS PUMP—WP935								
1930-34	A4, A5, A6, 2-3T. 6 Cyl.			PS98	PL99	Brg.	PB157	PN88	PK104	2
		THOMPSON PACKLESS PUMP—WP949								
1928-34	S26, SD36, SL36, SF36, SD46, SF46, after Eng. No. 4SL-15936, A3, A3½, AL3, 1¼-2T		PA34	PS26	PL22	PB66	PB66	PN31	PK104	2
1926-28	S26, SD36, SL36, SF36, SD46, SF46, to Eng. No. 4SL-15936, 1¼, 1½T. 6 Cyl.		PA32	PS8	PL7	PB24		PN12	PK119	2
	JEWETT									
1926	New Day, 6-40, 6-45			PS60	PL56	Brg.	PB106	PN38	PK121	2
1925	6-55			PS58			PB106	PN59R PN60L	PK162	3
	LAFAYETTE									
1937-38	3710, 3810	WS61	PA155			PB67		PN33	PK164	3
1935-36	3510, 3610	WS60	PA123			PB67		PN33	PK164	3
1934	110, 6 Cyl.		PA37			PB67		PN33	PK164	3
	LA SALLE									
1937-38	37-50, 38-50	WS63	PA149			Center ☞PC223			PK214	
						Gland Inner ☞PB224 (2 used)				
						Gland Outer ☞PB225				
1936	3650 After Eng. 2215050	WS40		PS173	PL151	PB232	PB49	PN111	PK198	2
				♂Shaft and fan hub						
1936	36-50 to Eng. 2215050	WS39		PS173	PL151	PB222	PB49	PN111	PK198	2
				♂Shaft and fan hub						
1934-35	350 after Eng. 2106606, 35-50			PS137	PL151	PB188	PB49	PN111	PK198	2
				♂Shaft and fan hub						
1934	350 to Eng. 2106606			PS141	PL132	Brg.	PB189	PN113	PK197	2
1927-33	303, 328, 340, 345, 345B, 345C		PA43			PB73 (Cover) PB74 (Body) PB75 (Lining)		PN5	PK124	3
	LINCOLN									
1936-37	Zephyr 901, HB			PS200	PL185	Brg.	PB262		PK319	
									♂Seal Assy.	

Ly-Na Alphabetical List—Water Pump Parts

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings		Packing Nuts	Packing Unit Package	Packing Rings per Pkg.
	LYCOMING MOTOR									
	GF, GG, 8 Cyl. WF, 6 Cyl.			PS152	PL142	Brg. Used			PK302 ♂Seal Assy.	
	BB, 12 Cyl.			PS87		Brg. Used		PN78	PK112	2
	FDA			PS76	PL93	PB127	PB24	PN12R PN70L	PK111	6
	GR, GS, GT, GU, MD to No. 24770, 4H, 4HM after No. 7129, 8 Cyl., 4SL to No. 15936, 4S, 4SM after No. 6339, 6 Cyl.		PA32	PS8	PL7	PB24		PN12	PK119	2
	MD, MDA after 24770, 8 Cyl.			PS8	PL74	PB24		PN12	PK119	2
	TF, TS, 6 Cyl.			PS102	PL101	Brg.	PB158	PN89	PK128	2
	4H, 4HM to No. 7129, 8 Cyl.			PS76	PL68	PB24	PB127	PN12R PN70L	PK111	6
	4SL After No. 15936, WRG, WRP, WSG, WTG, 6-8 Cyl.		PA34	PS26	PL22	PB66	PB66	PN31	PK104	2
	4SM to No. 6339, 6 Cyl.			PS8		PB24		PN12		
	MACK JR. TRUCK									
1936-37	1MA, 10MA, 10MB, 10MX, 2M6A, 2M6AS, 10MF, 11M, ½-1½T; 6 Cyl.				PL57	PB220		Seal Assy. ☞PK305		
1936-37	20M, 21M, 30M, 90M, 6 Cyl.		PA79			Brg.		PN14	PK169	4
	MACK TRUCK									
1930-32	BJ, BK, AC, AK, 5½-9T. (BK Mtr.)			PS129	PL123	Brg.	PB180	PN109	PK133	2
1929-35	BC, BM, 3½-5T. (BC Mtr.) BX, CL, 4-10T. (BX Mtr.)			PS128	PL122	Brg.	PB180	PN108	PK133	2
1929-35	BG, BL, BF, AB, 1-5T. (BG, BL Mtr.)			PS127	PL121	Brg.	PB81	PN107		
1928-35	AB, AC, AK, AL, AP, 1½-7½T. (Cast in Block) (AB, AK, AC Mtr.)			PS126	PL120	Brg.	PB81	PN106	PK194	2
1916-28	AC, 3½-15T. (Cast in Pairs)			PS63	PL57	PB114	PB115	PN65	PK195	5
1916-28	AB, AL, 1-5T (Cast in Pairs)			PS61	PL55	PB111	PB110	PN63	PK193	5
	MARMON									
1930-32	79, Big 8, 88, 8-125			PS77	PL69 Packing Gland	PB128 ☞PB140	PB128		PK149	5
1928-29	78, 8 Cyl.		PA58				PB99	PN51	PK146	3
1928-31	68, 69, 70, (With Hex. Pack. Nut)			PS48	PL43	PB93	PB93	PN46	PK104	2
1928-31	68, 69, 70 (Ball Bearing in Front)			PS47	PL41	Brg.	PB92	PN45	PK148	2
1927	Little Eight			PS62	PL58		PB99	PN51	PK146	3
	MARQUETTE									
1930	30, 6 Cyl.			PS75	PL4	PB16	PB126	PN69	PK144	2
	McCORMICK DEERING									
1935-36	W30			PS180	PL165	PB234	PB235	PN130	PK216	2
1936-37	Combine No. 31R, 31RW, 31T, 41, 51		PA168			Brg.	PB61	PN2	PK101	2
1934-35	Combine No. 31T, 41, 51		PA28			Brg.	PB61	PN2	PK101	2
	NASH									
1937-38	3720, 3820, 6 Cyl., 3780, 3880, 8 Cyl.	WS61	PA155			PB67		PN33	PK164	3
1936	3640, Series 400, 6 Cyl.				PL156					
1935-36	3520, 3620, 6 Cyl.	WS60	PA123			PB67		PN33	PK164	3
1935-36	3580, 3680, 8 Cyl.		PA124			PB67		PN33	PK164	3
1932-33	1070, 1170, 8 Cyl.			PS78	PL23	PB70	PB70			
1932-33	Big 6, 1060			PS24	PL23	PB70	PB70			
1931-34	8-80, 9-80, 1080, 1180, 1280		PA36			PB67		PN33	PK164	3

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings	Packing Nuts	Packing Unit Package	Packing Rings per Pkg.
	NASH (Cont'd)								
1931-32	8-70, 9-70, 8 Cyl.			PS78	PL70	PB32	PB105		
	THOMPSON PACKLESS PUMP—WP951								
1931	6-60, 6 Cyl.			PS79	PL70	PB32	PB33	PN15	
							♂ Supplied with packing pressed in		
	THOMPSON PACKLESS PUMP—WP924								
1933-34	1130, 8 Cyl. 1120, 1220, 6 Cyl.		PA37			PB67		PN33	PK164	3
1930-34	490, After Serial 505185, 890, 990, 1090, 1190, 1290		PA37			PB67		PN33	PK164	3
1930	490 to Serial 503970		PA67			PB103		PN33	PK154	6
1930	Twin Ign. 6, 480		PA50			PB78		PN35	PK113	3
1930-32	450 After Mtr. 238280, 960			PS24	PL70	PB32	PB33	PN15		
							♂Supplied with packing pressed in		
1930	450 to Mtr. 235880			PS39	PL34	PB32	PB33	PN15		
							♂ Supplied with packing pressed in		
1929	Advanced Six, 460 to 470		PA45			PB76		PN20	PK151	2
1929	Special Six, 431 to 442		PA47			PB77		PN30	PK153	2
1929	Std. 6, 420 After Eng. 200766		PA38	PS10	PL12	PB32	PB33	PN15		
							♂ Supplied with packing pressed in		
1929	Std. 6, 420 to Eng. 200766		PA38	PS10	PL12	PB32	PB68	PN15		
							♂ Supplied with packing pressed in		
1928	Std. 6, 320 After Serial 105088			PS10	PL46	PB32	PB144	PN15		
							♂ Supplied with packing pressed in		
1928	Std. 6, 320 Serial 88868 to 105088			PS10	PL46	PB142	PB143	PN73	PK113	3
1926-28	Special 6, 231 to 241 After Serial A26276, 331 to 341		PA46			PB77		PN30	PK153	2
1925-28	Adv. 6, 161 to 169, 261 to 270, 361 to 371		PA44			PB76		PN20	PK151	2
1925	Spec. 6, 131 to Serial A26267		PA63			PB103		PN55	PK152	2
1925-28	Ajax 21, 51, Light 6, 221 to 227 Std. 6, 320 to 328, to Serial 88868		PA72	PS10	PL71	PB142	PB141	PN73	PK113	3
	OAKLAND								
1930-31	O-6		PA25			PB15	PB50	PN8	PK135	2
	THOMPSON PACKLESS PUMP—WP909								
1928-29	All American Six		PA42	PS17	PL19	PB15	PB51	PN8	PK135	2
	THOMPSON PACKLESS PUMP—WP910								
1924-27	6-54, 6-54B, O-6, GO-6			PS22	PL20	PB52	PB53	PN23	PK135	2
	OLDSMOBILE								
1937-38	F37, F38, 6 Cyl.; L37, L38, 8 Cyl.	WS43		PS191	PL175	Brg.		Seal Assy. ☞PK320 By Pass Seal ☞PK326		
1936	F36, 6 Cyl. to Eng. F526847	WS41		PS173	PL150	PB222	PB49	PN111	PK198	2
1936	L36, 8 Cyl. to Eng. L210945	WS39		PS173	PL151	PB222	PB49	PN111	PK198	2
1936	F36, 6 Cyl. after Eng. F526847	WS42		PS173	PL150	PB232	PB49	PN111	PK198	2
1936	L36, 8 Cyl. after Eng. L210945	WS40		PS173	PL151	PB232	PB49	PN111	PK198	2
1935	L35			PS137	PL151	PB188	PB49	PN111	PK198	2
1934-35	F34 After F361613 and FR1300, F35	WS26		PS137	PL150	PB188	PB49	PN111	PK198	2
1934	F34, to Eng. F361613 and FR1300			PS137	PL143	PB188	PB49	PN111	PK198	2
1933-34	F33, L33, L34, 6-8 Cyl. Replacement type pump with oil cup at rear bushing		PA147			PB252	PB253	PN113	PK197	2
						Rear bushing liner ☞PB254				
1933-34	F33, L33, L34, 6-8 Cyl. Production type pump with grease fitting at rear bushing	WS27		PS141	PL132	Brg.	PB189	PN113	PK197	2
1931	F31, 6 Cyl. Replacement type pump with threaded shaft		PA146			Brg.	PB251	PN9	PK144	2
1931	F31, 6 Cyl. Production type pump with plain shaft.		PA23			PB47	PB48	PN9	PK144	2
	THOMPSON PACKLESS PUMP—WP937									
1932	*F32, L32 6-8 Cyl.			PS19	PL17		PB44	PN21	PK145	2
	THOMPSON PACKLESS PUMP—WP938									

Alphabetical List—Water Pump Parts

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings		Packing Nuts	Packing	
									Unit Package	Rings per Pkg.
	OLDSMOBILE (Cont'd)									
1929-30	F29, F30, 6 Cyl.			PS5	PL4	PB18	PB17	PN9	PK144	2
1928	F28, 6 Cyl.			PS5	PL4	PB16	PB17	PN9	PK144	2
1924-27	30A, B, C, D, E		PA59	PS16	PL18	PB45	PB46	PN22	PK143	2
	OVERLAND									
1929-31	Whippet 96A, 98A, C101 Truck to No. 9475, 4-6 Cyl.	WS9	PA16			PB30	PB31	PN2	PK101	2
1928	Whippet 98, C101 Truck, 6 Cyl.		PA16			PB29	PB31	PN2	PK101	2
1928	Whippet 96 After Serial 135155, 4 Cyl.		PA29			PB29	PB31	PN2	PK101	2
1927	Whippet 96 After Mtr. 15527, 93A, 4-6 Cyl.		PA52			Brg.		PN37	PK144	2
1926	Whippet 96 to Mtr. 15527, 4 Cyl.		PA68			Brg.		PN37	PK144	2
	PACKARD									
1938	1600, 1601, 1602, 6-8 Cyl.	WS68		PS207 ♂Shaft and Bearing	PL187				PK322 ♂Seal Assy.	
1935-37	120, 120B, 120C, 115C, 6-8 Cyl.	WS47		PS166	PL154	PB217	PB216	PN125	PK198	2
1933-34	1005, 1006, 1106, 1107, 1108, 12 Cyl.			PS149	PL114	Brg.	Brg.	PN104	PK192	2
1932	905, 906, 906C, 12 Cyl.			PS122	PL114	Brg.	Brg.	PN104	PK192	2
1930-36	740, 745 (Replacement Pump 183960) 840, 845, 903, 904, 1003, 1004, 1103, 1104, 1105, 1203-4-5, 1400-1-2-3-4-5, 8 Cyl.			PS15	PL11	Brg.		PN18	PK172	2
1930	740, 745 (Original Pump)			PS121	PL11	Brg.	PB176	PN103	PK172	2
1930-34	726, 733, (Replacement Pump 201676), 826, 833, 900, 901, 902, 1001, 1002, 1100, 1101, 1102			PS18	PL11	Brg.	Brg.	PN18	PK172	2
1930	726, 733 (Original Pump)			PS120	PL11	Brg.	PB176	PN103	PK172	2
1929	626, 633 (Side Pump)			PS52	PL47	Brg.	PB101	PN52	PK124	3
1929	626, 633, (Top Pump)			PS53	PL47	Brg.	PB101	PN52	PK124	3
1922-28	All 6 and 8 Cyl.			PS52	PL47	Brg.	PB100	PN54	PK133	2
	PAIGE									
1927	8-85		PA32	PS8	PL7	PB24		PN12	PK119	2
1927	6-40, 6-45			PS60	PL56	Brg.	PB109	PN38	PK121	2
1927	6-65, 6-75			PS58			PB106	PN59R PN60L	PK162	3
1926	6-72						PB106	PN59R PN60L	PK162	3
	PIERCE ARROW									
1932	54, 8 Cyl.		PA85			PB174		PN102	PK115	4
1932	51, 52, 53, 12 Cyl.		PA86			PB174		PN102	PK115	4
1930-31	A, B, C, 41, 42, 43, 8 Cyl.		PA84			PB174	PB175	PN101	PK115	4
	PLYMOUTH									
1935-38	PJ, P1, P2, P3, P4, P5, P6	WS15	PA92 PA89 ♂Includes Seal Assy.	PS100	PL128	PB186 PB303 ♂Thrust Washer	PB187		PK300 ♂Seal Assy.	
		THOMPSON PACKLESS PUMP—WP953								
1934	PE, PF, PG	WS15	PA92 PA89 ♂Includes Seal Assy.	PS100	PL128	PB186 PB303 ♂Thrust Washer	PB187		PK300 ♂Seal Assy.	
		THOMPSON PACKLESS PUMP—WP936								
1933	PC, PD	WS15	PA92 PA89 ♂Includes Seal Assy.	PS100	PL128	PB186 PB303 ♂Thrust Washer	PB187		PK300 ♂Seal Assy.	
		THOMPSON PACKLESS PUMP—WP921								
1931-32	PA, PB, 4 Cyl.	WS44	PA4 Rear Bushing & Retainer Assy.			PB4	PB5 ☞PB64	PN3	PK134	2
1930	30U, 4 Cyl.	WS4	PA3 Rear Bushing & Retainer Assy. ☞PB62	PS29	PL27	PB2	PB3	PN2	PK104	2
		THOMPSON PACKLESS PUMP—WP913								

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings		Packing Nuts	Packing Unit Package	Packing Rings per Pkg.
	PLYMOUTH TRUCK									
1937-38	PT50, PT57	WS15	PA92 PA89 ♂Includes Seal Assy.	PS100	PL128	PB186 PB303 ♂Thrust Washer	PB187		PK300 ♂Seal Assy.	
		THOMPSON PACKLESS PUMP—WP953								
	PONTIAC									
1938	38-26DA, 6 Cyl.; 38-28DA, 8 Cyl.	WS73		PS191 ♂Shaft and Bearing	PL188				PK327 ♂Seal Assy.	
1937	37-26, 6 Cyl. 37-28, 8 Cyl. (For packless type pump)	WS69		PS191	PL176			Seal Assy. ☞	PK320	
1937	37-36, 6 Cyl. 37-28, 8 Cyl. (For pumps with packing nut)	WS57		PS192	PL177	PB258	PB49	PN111	PK198	2
1933-36	All 6 and 8 Cyl. with grease fitting at front bushing	WS58		PS137	PL100	PB258	PB49	PN111	PK198	2
		THOMPSON PACKLESS PUMP—WP957								
1933-36	All 6 and 8 Cyl. with oil cup at front bushing	WS28		PS137	PL100	PB188	PB49	PN111	PK198	2
		THOMPSON PACKLESS PUMP—WP957								
1932	V-8		PA24			PB15	PB49	PN8	PK135	2
		THOMPSON PACKLESS PUMP—WP909								
1932	Six after 729001	WS59	PA7			PB15	PB49	PN8	PK135	2
		THOMPSON PACKLESS PUMP—WP908								
1929-31	Eng. 490159 to 729001	WS7	PA7			PB15	PB13	PN8	PK135	2
		THOMPSON PACKLESS PUMP—WP907								
1929	Eng. 410101 to 490158	WS7	PA7			PB15	PB13	PN8	PK135	2
		THOMPSON PACKLESS PUMP—WP906								
1928	Six 204001 to 410101	WS6	PA6			PB14	PB13	PN8	PK135	2
1926-27	Six to 204001			PS4	PL3	PB12	PB13	PN8	PK135	2
	REO									
1932-36	Flying Cloud, S, S2, 3S, 4S, 6A, 7S, 6D, 6-8 Cyl.		PA79			Brg.		PN14	PK169	4
1931-34	Royale 8-31, 8-35, Royale 2N, 1N, 8 Cyl.		PA78			Brg.		PN86	PK169	4
1931-32	8-21, 8-25			PS74	PL96	Brg.	PB125	PN67	PK171	2
1930	15, B3, 6 Cyl.			PS104	PL97	PB81	PB81	PN87	PK106	2
1927-29	Wolverine B, Mate B2, 6 Cyl.			PS37	PL32	Brg.	PB69	PN36	PK106	2
1927-32	Flying Cloud AC, Master 20, 25, 6-21, 6-25		PA12			Brg.		PN14	PK169	4
1920-27	T6, U6		PA57	PS95	PL94	Brg.	PB98	PN50R PN49L	PK168	12
	REO TRUCK									
1935-36	1A4, 1C4, 1½T. 6 Cyl.		PA132	PS169	PL157	Brg.	PB220		PK305 ♂Seal Assy.	
1933-36	2H, 2J, 2K, 3H, 3J, 3K, 3M, 3MR, 3HR, 3JR, 2½-3T.		PA101					PN14	PK169	4
1932-36	1B, 1D After S-501, 2B, 2D, 1B4R, 1D4, 2B4, 2D4, 1½-2T.		PA79			Brg.		PN14	PK169	4
1930-32	DF, DFX, DF129, DF135, 1½T. to. Eng S-501		PA12			Brg.		PN14	PK169	4
1930-31	Junior, 15, 15A, ½T.			PS104	PL97	PB81	PB81	PN87	PK106	2
1929-33	FA, FE, FF, GA, GC, GD, FAX, FCX, FDX, FEX, FFX, FHX, 1½-3T.		PA62			Brg.		PN14	PK175	4
1928-29	BA After Serial 750, DA After Serial 757, DC, Speed Wagon, Jr.			PS37	PL32		PB69	PN36	PK106	2
1927-28	Speedwagon Jr., BA to Serial 750, DA to Serial 757			PS37	PL32	Brg.	PB69	PN36	PK106	2
1925-28	F, G, FC, FD, FA, FE, FF, GA, GC, GD, 1¼-3T., FB, GB		PA57	PS95	PL94	Brg.	PB98	PN50R PN49L	PK168	12
	ROCKNE									
1932-33	6-65, 10	WS29	PA27	PS20	PL24	PB56	PB57	PN25	PK165	4
1932	6-75		PA35			Brg.	PB79	PN32	PK166	2

Ro-Te Alphabetical List—Water Pump Parts

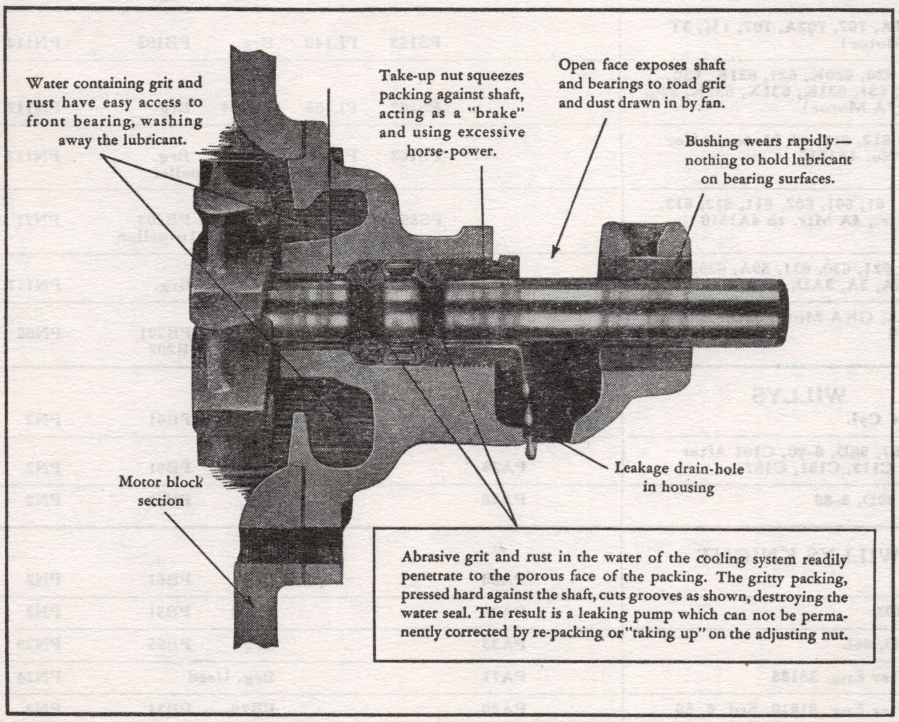
Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings		Packing Nuts	Packing	
									Unit Package	Rings per Pkg.
	ROOSEVELT									
1929-30	(With Hex. Packing Nut)			PS48	PL43	PB93	PB93	PN46	PK104	2
1929-30	(Ball Bearing in Front)			PS47	PL41	Brg.	PB92	PN45	PK148	2
	STUDEBAKER									
1938	7A, Comm. 8A, Exp. K5	WS71	PA183			PB228	PB229	PN128	PK165	4
1938	President 8, 4C	WS70	PA189			PB228	PB229	PN128	PK165	4
1936-37	Dictator, 3A, 4A, 5A, 6A	WS54	PA137	PS20	PL162	PB228	PB229	PN128	PK165	4
1934-37	Comm. B, Pres. C, 1B, 1C, 2C, 3C	WS53	PA99	PS147	PL138	PB199	PB200	PN116	PK203	4
1934-35	Dictator A, 1A, 2A	WS29	PA27	PS20	PL24	PB56	PB57	PN25	PK165	4
1933	President 92		PA91	PS140	PL131	PB191	PB192	PN24	PK178	4
1933	Comm. 73, Pres. 82		PA90	PS139	PL21	PB191	PB192	PN24	PK178	4
1933	56, Six			PS138	PL129	Brg.	PB190	PN32	PK166	2
1931-32	54, 55, Six		PA35			Brg.	PB79	PN32	PK166	2
1929-32	Comm. 70, 71, Dict. 61, 62, 8 Cyl.		PA26	PS23	PL21 Center Bush.	PB55	PB54 ☞PB54	PN24	PK178	4
1929-32	President 80, 90, 91		PA8	PS6	PL5 Center Bush.	PB19	PB21 ☞PB20	PN10	PK177	2
1928	President 8, (Front Pump)			PS54	PL50		PB102	PN10	PK177	2
1928	President 8, (Side Pump)		PA80	PS101	PL5 Center Bush.	PB19	PB21 ☞PB20	PN10	PK177	2
1922-28	EK, EL, EQ, EP, Pres. 6, Comm. 6, to Serial 4070500		PA41	PS46	PL40	Brg.	PB91	PN42	PK176	2
1919-30	EJ, EM, Light 6, ER, Std. 6, Comm. 6 After 4070500, Dict. 6, GE, GL, Comm. 6, GK, 53		PA40	PS45	PL42 Center Bush.	PB88	PB90 ☞PB89	PN24 PN44 Center PN43	PK167	10
	STUDEBAKER TRUCK									
1935-36	Mogul, 1W7, 2½T. 6 Cyl.			PS177	PL163	Brg.	PB230	PN129	PK215	
1931-33	S2, S4, S6, S8, S10, S20, S21, S30, S31, S40, S41, S50, S51, S60, S61, S120, S130, S140, S150, S111, First Type, ¾" I. D. Roller Bearing		PA35			Brg.	PB79	PN32	PK166	2
	Second Type, ⅞" I. D. Roller Brg.			PS138	PL129	Brg.	PB190	PN32	PK166	2
	Third Type, Cast Iron Pulley and Tapered Bearings		PA103 ♂Assy. of Shaft & Pulley Hub	PS159	PL140	Brg.	PB193	PN114	PK207	4
	FJH, FJH1, FJH2, S100, S101, 8 Cyl.		PA26	PS23	PL21 Center Bush.	PB55	PB54 ☞PB54	PN24	PK178	4
1929-32	Jr. DA77, FE, Spec. DA88, 88, Heavy Duty DA99, 99, DAY 111, 111, FLH, FLH1, FLH2, 2½, 3½T. 8 Cyl.		PA8	PS6	PL5 Center Bush.	PB19	PB21 ☞PB20	PN10	PK177	2
1927-32	GEB, 20, 20GN, GDN, GDH, 30, 30GN, 32GKN, GKH, 32GK, 40, 40GN, GNN, GKH1, GKH2, 6 Cyl.		PA40	PS45	PL42 Center Bush.	PB88	PB90 ☞PB89	PN24 PN44 Center PN43	PK167	10
1927-28	ETH, BA1, BA19, BA20, BA21, BA22, 75HD, 76SP, 75Jr., 6 Cyl.		PA41	PS46	PL40		PB91	PN42	PK176	2
	TERRAPLANE									
1936-38	61, 62, 70, 71, 72, 80, 81, 82, 88,6 Cyl.	WS51		PS175	PL160	PB227	PB227	Seal Assy. ☞PK306		
1935	Spec. G, DeLuxe GU, 6 Cyl. (For production type pump)	WS24		PS164	PL153	PB240 Gland	PB72 ☞PB151	PN34	PK125	1
1934-35	All Models (For replacement type pump)	WS52		PS175	PL172	PB227	PB227	Seal Assy. ☞PK306		
1934	K, KS, 6 Cyl. (For production type pump)	WS49		PS151	PL28	PB71 Gland	PB72 ☞PB151	PN34	PK125	1
1934	KU, Six Cyl. (For Production Type Pump)		PA104 ♂Shaft & Fan Hub Assy.	PS167	PL28	PB71 Gland	PB72 ☞PB151	PN34	PK125	1

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings		Packing Nuts	Packing	
									Unit Package	Rings per Pkg.
	TERRAPLANE (Cont'd)									
1933	K, KU, Six, KT, Eight	WS48		PS136	PL28	PB71	PB72	PN34	PK125	1
				♂Lock Ring Inc.		Gland ☞PB151				
		THOMPSON PACKLESS PUMP—WP948								
1932	Six			PS25	PL28	PB71	PB72	PN34	PK125	1
						Gland ☞PB151				
	VIKING									
1929–30	V29, V30			PS5	PL4	PB18	PB17	PN9	PK144	2
	WHIPPET									
1929–30	96A, 98A, C101 Truck to 9475, 4–6 Cyl.	WS9	PA16			PB30	PB31	PN2	PK101	2
1928	98, C101 Truck 6 Cyl.		PA16			PB29	PB31	PN2	PK101	2
1928	96 After Serial 135155, 4 Cyl.	WS11	PA29			PB29	PB31	PN2	PK101	2
1927	96 After Mtr. 15527, 93A, 4–6 Cyl.		PA52			Brg.		PN37	PK144	2
1926	96 to Mtr. 15527, 4 Cyl.		PA68			Brg.		PN37	PK144	2
	WHITE									
1934–37	712, 718, 703, 704, 709, 1¼, 4T, 706, 713 Bus (9A and 11A Motors)			PS163		PB204	Brg.	PN124	PK204	5
1934–35	701, 701A, 702, 702A, 707, 1¼, 3T (8A Motor)			PS159	PL140	Brg.	PB193	PN114	PK207	2
1933–35	586GS, 620, 620K, 621, 621K, 630, 630K, 631, 631K, 631X, 632X, 2½, 10T (7A Motor)			PS162	PL155	PB204	Brg.	PN117	PK204	5
1931–35	61, 611, 612, 613, 4A Motor, After Mtr. No. 4A1510			PS162	PL148	PB204	Brg.	PN117	PK204	5
					♂Keyed Type Impeller					
1928–34	60, 60K, 61, 601, 602, 611, 612, 613, 2A Mtr., 4A Mtr. to 4A1510			PS85	PL82	PB139	PB203	PN77	PK204	5
					♂Set Screw Type Impeller					
1929–34	63, 620, 621, 630, 631, 59A, 630SW200, 65, 65A, 3A, 3AD, Mtr.			PS148	PL83	PB204	Brg.	PN117	PK204	5
1928–31	15B, 20A, GKA Motor after Serial 146826			PS83	PL78		PB201	PN95	PK158	3
						Gland ☞PB202				
	WILLYS									
1933–37	77, 37, 4 Cyl.	WS55	PA93				PB61	PN2	PK101	2
1930–32	98B, 6–97, 98D, 6–90, C101 After 9475, C113, C131, C157		PA28			Brg.	PB61	PN2	PK101	2
1930–32	8–80, 8–80D, 8–88		PA28			Brg.	PB61	PN2	PK101	2
	WILLYS KNIGHT									
1930–32	87, 95		PA28			Brg.	PB61	PN2	PK101	2
1929–30	70B, C103		PA29			PB30	PB31	PN2	PK101	2
1929–32	66B, 66D, 66E		PA33			Brg.	PB65	PN29	PK166	2
1928	66A, After Eng. 38185		PA71			Brg. Used		PN74	PK144	2
1928–29	70A, After Eng. 81810, Std. 6, 56		PA29			PB29	PB31	PN2	PK101	2
1926–28	70, 70A to Eng. 81810		PA55			Brg.		PN37	PK144	2
	YELLOW COACH									
1936	733, 6 Cyl. (207 Motor)			PS202	PL161	Brg.	PB7	PN139	PK102	6
								Includes Spacer ☞PK202		2
		THOMPSON PACKLESS PUMP—WP980								
1935–37	714, 715, 716, 717, 719, 722, 723, 725, 727, 728, 729, 731, 734, 738, 739 (257, 331, 400, and 450 Motors with Seal type pump)							Seal Assy. ☞PK325		
1933–35	U, 605, 607, 662, 665, 716, 723, 769, 770, 771, 772, 785 (331 Motor); U, 711, 716, 717, 722, 754, 760, 764 (400 Motor with Pump at Front)		PA118	PS158	PL145	Brg.	PB193	PN114	PK199	3
1933–34	709, 712, 714, 715 (257 Motor with Packing Nut type pump)		PA94	PS142	PL133	PB193		PN114	PK199	3

Ye-Ye Alphabetical List—Water Pump Parts

Years	MAKE and MODEL	Water Pump Parts Set	Shaft and Impeller Assembly	Pump Shaft	Pump Impeller	Bushings	Packing Nuts	Packing	
								Unit Package	Rings per Pkg.
	YELLOW COACH (Cont'd)								
1931-33	U, 605, 607, 612, 654, 662, 665, WX, 375 (331 Motor with Down Draft Carb.) U, 711, 754, 760, 764, (400 Motor with Pump on Side; 9 ⅛" Shaft)	PA83	PS110		PL108	PB167 PB168 Packing Gland ☞PB212	PN95	PK186	4
1929-31	WX, WXA, WXB, WXC, WXD, U, UA, UC, UF, UJ, UL, Up-draft Carb.	PA48	PS7		PL6	PB23 PB22 Cover Plate Thrust Washer ☞PB301	PN11	PK122	3
1928-29	W, WA, WC, WF, WG, W185, W215, 365, 366, 603, 661, 663, 8 Cyl.	PA43				Cover ☞PB73 Body ☞PB74 Lining ☞PB75	PN5	PK124	3

Cross-section of ordinary worn pump



Abrasive grit and rust in the water of the cooling system readily penetrate to the porous face of the packing. The gritty packing, pressed hard against the shaft, cuts grooves as shown, destroying the water seal. The result is a leaking pump which can not be permanently corrected by re-packing or "taking up" on the adjusting nut.

These are unretouched illustrations of impeller shafts taken from packing-type pumps after actual service. Note the grooves cut by the abrasive action of grit-filled packing; also excessive wear on the bearing surfaces. No amount of "taking-up" or re-packing can permanently correct leakage caused by grooved shafts.

REBUILD with Thompson water pump parts . . . . better still, REPLACE with a modern Thompson PACKLESS Pump

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

AJAX — 1926

209	2091	2091	553	5532	None					Front	2	0215	0022	Front	2	0216	0034
										Rear	4	0215	0022	Rear	4	0215	0022

ARMLEDER TRUCK — 1932

328	3281	3281															

AUBURN — 1924-25

185	1843	1844	Ball Type Used														

AUBURN — 1925-27

232	2321	2321	Ball Type Used														

AUBURN — 1925-27

185	1851	1851	Ball Type Used														

AUBURN — 1927-28

248	2481	2481	Ball Type Used														
	2481SB	2481SB															

AUBURN — 1928

302	2481	2481	Ball Type Used														
	2481SB	2481SB															

AUBURN — 1928

302	2481	2481				ES1	ET1										
	2481SB	2481SB															

AUBURN — 1928-30

302	2481	2481				ES1	ET13										
	2481SB	2481SB															

AUBURN — 1928-30

303	2351	2351				ES1	ET13										

AUBURN — 1931-33

302	2481	2481				ES1	ET33										
	2481SB	2481SB															

AUBURN — 1934-35

364	3643	3644				RS25 (Int. Rod Fact. Dup.)	ET41										

AUBURN — 1934-35

364	3643	3644				ES14	ET40										

AUBURN — 1936

364	3643	3644															

AUSTIN — 1930-35

314	3141	3141	Ball Type Used														
314AX (Complete King Pin Assembly)																	

AUTOCAR TRUCK — 1916-23

216	1941	1941	555	5553	5554												

AUTOCAR TRUCK — 1925-26

243	2141	2434	554	5541	5541												
			Sleeve 125	5545													

AUTOCAR TRUCK — 1927-28

262	2621	2621	Ball Type Used														

AUTOCAR TRUCK — 1931-35

402	4021	4021															

AUTOCAR TRUCK — 1931-35

403	4031	4031															

AUTOCAR TRUCK — 1932-35

322	3221	3221															

BROCKWAY TRUCK — 1922-25

204	2043	2044	552	5523	5524												

MODELS 21, 51—CYLS. 6—AXLE OWN

										Front	2	0215	0022	Front	2	0216	0034
										Rear	4	0215	0022	Rear	4	0215	0022

MODELS 21HA, 2¼, 4 T—CYLS. 6—AXLE TIMK. 12703

MODELS 8-63—CYLS. 8—AXLE COLUM.

MODELS 4-44—CYLS. 4—AXLE TIMK.

MODELS 6-66, 8-88—CYLS. 6-8—AXLE COLUM.

MODELS 6-66A, 8-77—CYLS. 6-8—AXLE COLUM.

MODELS 76, 6-80—CYLS. 6—AXLE COLUM.

MODELS 8-88, 8-90—CYLS. 8—AXLE COLUM.

MODELS 6-85, 8-95—CYLS. 6-8—AXLE COLUM.

MODELS 115, 120, 125—CYLS. 8—AXLE COLUM.

MODELS 8-98, 8-100, 8-101, 8-105—CYLS. 8—AXLE COLUM.

										Rear	8	HB686					

MODELS 652, 652X, 652Y, 653—CYLS. 6—AXLE COLUM.

										Front	8	HB680		Front	4	HB682	
										Rear	8	HB680		Rear	8	HB680	

MODELS 850, 850X, 850Y, 851—CYLS. 8—AXLE COLUM.

										Front	8	HB680		Front	4	HB682	
										Rear Lr.	4	HB680		Rear	8	HB680	
										Rear Up.	4	HB686					

MODELS 654, 852—CYLS. 6-8—AXLE COLUM.

										Front	8	HB680		Front	4	HB682	
										Rear	8	HB680		Rear	4	HB686	

MODELS AMERICAN 375, 475—CYLS. 4—AXLE OWN

MODELS A, B, C, D, E, F, G, 1½, T, 2 T—CYLS. 2—AXLE OWN

MODELS 2, 3 T—CYLS. 4—AXLE OWN

MODELS A, 2 T, 4 BRAKES—CYLS. 4—AXLE OWN

MODELS DF, DFT, DH, N, NE, NF, NH, NT, UD, UDF, UDT, UNT—CYLS. 6—AXLE TIMKEN

MODELS T23, W230, W240, 2½-3T—CYLS. 6—AXLE TIMKEN

MODELS R, RF, RG, 1½-5½T—CYLS. 6—AXLE TIMK.

MODELS S5, SF, 1½, T, S, SK, 2 T—CYLS. 4—AXLE TIMK. 1452

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

BROCKWAY TRUCK 1919-25

200 None 2002 552 5523 5524

BROCKWAY TRUCK 1924-25

202 None 2022 551 5513 5514

BROCKWAY TRUCK 1919-24

203 2032 2032 551 5513 5514

BROCKWAY TRUCK 1927-30

319 2471 2471

BROCKWAY TRUCK 1934-35

322 3221 3221

BUICK 1921-22

108 1051 1051 506 5062 None

BUICK 1922-23

107 1071 1071 507 5072 None

BUICK 1924

173 1471 1471 Ball Type Used
1471SB 1471SB

BUICK 1923

108 1081 1081 508 5082 None

BUICK 1924-27

175 1481 1481 ES2 ET2
175AX (Complete King Pin Assembly)

BUICK 1925-27

173 1471 1471 ES1 ET1
1471SB 1471SB (Int. Rod Fact. Dup.)
173AX (Complete King Pin Assembly)

BUICK 1928

175 1481 1481 ES2 ET2
175AX (Complete King Pin Assembly)

BUICK 1928

173 1471 1471 ES1 ET1
1471SB 1471SB
173AX (Complete King Pin Assembly)

BUICK 1929

175 1481 1481 ES2 ET2
175AX (Complete King Pin Assembly)

BUICK 1929

173 1471 1471 ES1 ET1
1471SB 1471SB (Int. Rod Fact. Dup.)
173AX (Complete King Pin Assembly)

BUICK 1930

175 1481 1481 ES12 ET17
(Int. Rod Fact. Dup.)
175AX (Complete King Pin Assembly)

BUICK 1930

173 1471 1471 ES11 ET16
1471SB 1471SB Int. Rod Fact. Dup.)
173AX (Complete King Pin Assembly)

BUICK 1931

242 2421 2421 ES14 ET11
(Int. Rod Fact. Dup.)
242AX (Complete King Pin Assembly)

MODELS K5, K6, 2½ T, K13, KR, 3 T, R2, R4, 3½ T—CYLS. 4—AXLE TIMK. 1542

MODELS R12, 3½ T, R14, 4 T—CYLS. 4—AXLE TIMK.

MODELS T, T6, 5 T—CYLS. 4—AXLE TIMK. 1730

MODELS JF, 90, JR, 1, 1¼ T—CYLS. 6—AXLE COLUM.

MODELS 50E, 50E1, 80, 1-2T—CYLS. 6—AXLE TIMK.

MODELS 21-44, 22-44, 45, 46, 47, 48, 49, 50—CYLS. 6—AXLE OWN

Front	2	06z	0012	Front	2	059	0013
Rear Up.	2	064	0039	Rear	2	063	0042
Rear Lr.	2	062	0012				

MODELS 33, 34, 35, 36, 37—CYLS. 4—AXLE OWN

Front	2	065	0011	Front Up.	2	062	0012
Rear Up.	2	066	007	Front Lr.	2	062	008
Rear Lr.	2	065	0011	Rear Up.	2	062	0012
				Rear Lr.	2	062	008

MODELS 33, 34, 35, 36, 37—CYLS. 4—AXLE OWN

Front	2	062	0012	Front Up.	2	062	008
Rear	4	062	0012	Front Lr.	2	062	0012
				Rear Up.	2	062	008
				Rear Lr.	2	062	0012

MODELS 23-41, 44 TO 50, 54, 55—CYLS. 6—AXLE OWN

Front	2	062	0012	Front	2	059	0013
Rear	4	067	0038	Rear	2	063	0042

MODELS 41-55, MASTER SIX—CYLS. 6—AXLE OWN

Front	2	068	0026	Front	2	059	0013
Rear Up.	2	067	0038	Rear	2	063	0042
Rear Lr.	2	069	0042				

MODELS STANDARD SIX—CYLS. 6—AXLE OWN

Front	2	062	0012	Front	2	059	0013
Rear Up.	2	062	0052	Rear	2	0220	0055
Rear Lr.	2	062	0012				

MODELS MASTER SIX, 120, 128—CYLS. 6—AXLE OWN

Front	2	068	0026	Front	2	0255	0013
Rear Up.	2	0265	0038	Rear	2	0264	0069
Rear Lr.	2	0266	0038				

MODELS STANDARD SIX, 115—CYLS. 6—AXLE OWN

Front	2	062	0012	Front	2	0255	0013
Rear Up.	2	062	0052	Rear	2	0220	0055
Rear Lr.	2	0254	0012				

MODELS MASTER SIX, 121, 129—CYLS. 6—AXLE OWN

Front	2	0267	0026	Front	2	0255	0013
Rear Up.	2	0265	0069	Rear	2	0264	0069
Rear Lr.	2	0266	0038				

MODELS STANDARD SIX, 116—CYLS. 6—AXLE OWN

Front	2	0275	0012	Front	2	0255	0013
Rear Up.	2	062	0052	Rear	2	0220	0055
Rear Lr.	2	0254	0012				

MODELS MASTER SIX, 50, 60—CYLS. 6—AXLE OWN

Front	2	0267	0026	Front Up.	2	0299	0074
Rear Up.	2	0298	0073	Front Lr.	2	0299	0035
Rear Lr.	2	0298	0038	Rear Up.	2	0300	0035
				Rear Lr.	2	0300	0075

MODELS STANDARD SIX, 40—CYLS. 6—AXLE OWN

Front	2	062	0012	Front Up.	2	0303	0070
Rear Up.	2	0302	0071	Front Lr.	2	0303	0023
Rear Lr.	2	0302	0012	Rear Up.	2	0304	0072
				Rear Lr.	2	0304	0023

MODELS 8-50 TO NO. 2489683—CYLS. 8—AXLE OWN

*T710 *T712	Front	2	062	0012	Front	2	0301	0022
SU802 SU801							

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.
(6-1-38)

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

BUICK **1931**

242 2421 2421 ES14 ET11 (Int. Rod Fact. Dup.)
242AX (Complete King Pin Assembly)

BUICK **1931**

173 1471 1471 ES15 ET18 (Int. Rod Fact. Dup.)
1471SB 1471SB
173AX (Complete King Pin Assembly)

BUICK **1931**

175 1481 1481 ES12 ET19
175AX (Complete King Pin Assembly)

BUICK **1932**

316 1471 1471 ES30 ET41 (Int. Rod Fact. Dup.)
1471SB 1471SB

BUICK **1932**

173 1471 1471 ES15 ET18 (Int. Rod Fact. Dup.)
1471SB 1471SB
173AX (Complete King Pin Assembly)

BUICK **1932**

175 1481 1481 ES12 ET19
175AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

BUICK **1933**

316 1471 1471 ES14 ET11 (Int. Rod Fact. Dup.)
1471SB 1471SB

BUICK **1933**

316 1471 1471 ES30 ET41 (Int. Rod Fact. Dup.)
1471SB 1471SB

BUICK **1933**

173 1471 1471 ES15 ET42 (Int. Rod Fact. Dup.)
1471SB 1471SB
173AX (Complete King Pin Assembly)

BUICK **1933**

175 1481 1481 ES12 ET43
175AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

BUICK **1934-35**

360 3601 3601 Right Hand Assembly ES40 ET53
360AX Left Hand Assembly ES40 ET53 (Int. Rod Fact. Dup.)
♂Complete King Pin Assembly

BUICK **1934-35**

349 1471 1471 Right Hand Assembly ES41 ET54
1471SB 1471SB Left Hand Assembly ES42 ET54 (Int. Rod Fact. Dup.)

BUICK **1934-35**

349 1471 1471 Right Hand Assembly ES41 ET54
1471SB 1471SB Left Hand Assembly ES42 ET54 (Int. Rod Fact. Dup.)

BUICK **1934-35**

350 1481 1481 Right Hand Assembly ES43 ET55
Left Hand Assembly ES44 ET55 (Int. Rod Fact. Dup.)

BUICK **1936**

360 3601 3601 Right Hand Assembly ES40 ET53
360AX Left Hand Assembly ES40 ET53 (Int. Rod Fact. Dup.)
♂Complete King Pin Assembly

MODELS 8-50 (AFTER FRAME NO. 2489683)—CYLS. 8—AXLE OWN

*T720 *T712 Front 2 062 0012
SU802 SU801
(*T726 or SU809 used on front of rear spring)

MODELS 8-60—CYLS. 8—AXLE OWN

MODELS 8-80, 8-90—CYLS. 8—AXLE OWN

(Int. Rod Fact. Dup.)

MODELS 32-50—CYLS. 8—AXLE OWN

Front	2	062	0012	Front	4	0339	0085
Rear	4	0339	0085	Rear	4	0339	0085

MODELS 32-60—CYLS. 8—AXLE OWN

Front	3	062	0012	Front Up.	2	0341	0087
Rear Up.	2	0341	0086	Front Lr.	2	0340	0087
Rear Lr.	2	0339	0085	Rear	4	0340	0087

MODELS 32-80, 32-90—CYLS. 8—AXLE OWN

Front	3	068	0026	Front Up.	2	0341	0087
Rear Up.	2	0341	0086	Front Lr.	2	0340	0087
Rear Lr.	2	0339	0085	Rear	4	0340	0087

MODELS 33-50 (TO FRAME NO. 2673137)—CYLS. 8—AXLE OWN

Front	2	062	0012	Front	4	0339	0085
Rear Up.	2	0340	0085	Rear	4	0339	0085
Rear Lr.	2	0339	0085				

MODELS 33-50 (AFTER FRAME NO. 2673137)—CYLS. 8—AXLE OWN

Front	2	062	0012	Front	4	0339	0085
Rear Up.	2	0340	0085	Rear	4	0339	0085
Rear Lr.	2	0339	0085				

MODELS 33-60—CYLS. 8—AXLE OWN

Front	3	062	0012	Front	4	0340	0087
Rear Up.	2	0340	0085	Rear	4	0340	0087
Rear Lr.	2	0339	0085				

MODELS 33-80, 33-90—CYLS. 8—AXLE OWN

Front	3	068	0026	Front	4	0340	0087
Rear Up.	2	0340	0085	Rear	4	0340	0087
Rear Lr.	2	0339	0085				

MODELS 34-40, 35-40—CYLS. 8—AXLE OWN

*SU830 (Front of Rear)

*SU817 (Rear of Rear)

MODELS 34-50, 35-50—CYLS. 8—AXLE OWN

*SU828 (Front of Rear)

*SU829 (Rear of Rear)

MODELS 34-60, 35-60—CYLS. 8—AXLE OWN

Front	4	0340	0087
Rear	4	0340	0087

MODELS 34-90, 35-90—CYLS. 8—AXLE OWN

Front	4	0340	0087
Rear	4	0340	0087

MODELS 36-40—CYLS. 8—AXLE OWN

*SU837 (Front of Rear)

*SU837 (Rear of Rear)

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

Bu-Ca Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

BUICK — 1936

379 3791 3791 — 379AX — ♂ Complete King Pin Assembly

Right Hand Assembly	ES52	ET52	
Left Hand Assembly	ES52	ET52	(Int. Rod Fact. Dup.)

BUICK — 1936

379 3791 3791 — 379AX — ♂ Complete King Pin Assembly

Right Hand Assembly	ES52	ET61	
Left Hand Assembly	ES52	ET61	(Int. Rod Fact. Dup.)

BUICK — 1936

380 3801 3801 — 380AX — ♂ Complete King Pin Assembly

Right Hand Assembly	ES52	ET61	
Left Hand Assembly	ES52	ET61	(Int. Rod Fact. Dup.)

BUICK — 1937

360 3601 3601 — 360AX — ♂ Complete King Pin Assembly

Right Hand Assembly	ES58	ET63	
Left Hand Assembly	ES58	ET63	(Int. Rod Fact. Dup.)

BUICK — 1937

379 3791 3791 — 379AX — ♂ Complete King Pin Assembly

Right Hand Assembly	ES58	ET61	
Left Hand Assembly	ES58	ET61	(Int. Rod Fact. Dup.)

BUICK — 1937

380 3801 3801 — 380AX — ♂ Complete King Pin Assembly

Right Hand Assembly	ES58	ET61	
Left Hand Assembly	ES58	ET61	(Int. Rod Fact. Dup.)

BUICK — 1938

360 3601 3601 — 360AX — ♂ Complete King Pin Assembly

Right Hand Assembly	ES71		
Left Hand Assembly	ES71		(See Footnote)

BUICK — 1938

379 3791 3791 — 379AX — ♂ Complete King Pin Assembly

Right Hand Assembly	ES58	ET61	
Left Hand Assembly	ES58	ET61	(Int. Rod Fact. Dup.)

BUICK — 1938

380 3801 3801 — 380AX — ♂ Complete King Pin Assembly

Right Hand Assembly	ES58	ET61	
Left Hand Assembly	ES58	ET61	

CADILLAC — 1920-25

113	Brg.	1112	501	5013	5014												

CADILLAC — 1925-26

217	Brg.	2172	Ball Type Used														

CADILLAC — 1926

217	Brg.	2562	Ball Type Used														

CADILLAC — 1926

257	Brg.	2572	Ball Type Used														

CADILLAC — 1927

257	Brg.	2572	Ball Type Used														

CADILLAC — 1928

257	Brg.	2572				ES2	ET2										

MODELS 36-60—CYLS. 8—AXLE OWN

Front	4	0340	0086				
Rear	4	0340	0086				

MODELS 36-80—CYLS. 8—AXLE OWN

Front	4	0340	0086				
Rear	4	0340	0086				

MODELS 36-90—CYLS. 8—AXLE OWN

Front	4	0340	0086				
Rear	4	0340	0086				

MODELS 37-40, 37-60—CYLS. 8—AXLE OWN

MODELS 37-80—CYLS. 8—AXLE OWN

Front	4	0342	0088				
Rear	4	0342	0088				

MODELS 37-90—CYLS. 8—AXLE OWN

Front	4	0342	0088				
Rear	4	0342	0088				

MODELS 40 SPECIAL, 60 CENTURY—CYLS. 8—AXLE OWN

MODELS 80 ROADMASTER—CYLS. 8—AXLE OWN

MODELS 90 LIMITED—CYLS. 8—AXLE OWN

MODELS 59, 61, V63—CYLS. 8—AXLE OWN

Front	2	075	0034	Front	2	076	0034
Rear	4	077	0036	Rear	4	075	0034

MODELS V63, 4 BRAKES—CYLS. 8—AXLE OWN

Front	2	075	0034	Front	2	076	0034
Rear	4	077	0036	Rear	4	075	0034

MODELS V63B—CYLS. 8—AXLE OWN

Front	2	075	0034	Front	2	076	0034
Rear	4	074	0036	Rear	4	075	0034

MODELS 314 TO FRAME I 4607—CYLS. 8—AXLE OWN

Front	2	075	0034	Front	2	0286	0035
Rear	4	077	0036	Rear	2	0287	0035

MODELS 314 AFTER FRAME I 4607—CYLS. 8—AXLE OWN

Front	2	0325	0034	Front	2	0326	0035
Rear	4	0257	0036	Rear	2	0287	0035

MODELS 341 TO ENG. 320002—CYLS. 8—AXLE OWN

Front	2	0327	0035	Front Up.	2	0329	0037
Rear Up.	2	0257	0036	Front Lr.	2	0329	0037
Rear Lr.	2	0257	0035	Rear	2	0329	0037

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.
(6-1-38)

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.
CADILLAC — 1929																	
257	Brg.	2572				ES2	ET2										
CADILLAC — 1930																	
291	Brg.	Used				ES2	ET35										
CADILLAC — 1931																	
291	Brg.	Used				ES2	ET14										
CADILLAC — 1932																	
291	Brg.	Used				ES2	ET35										
CADILLAC — 1931																	
291	Brg.	Used				ES2	ET14										
CADILLAC — 1932																	
291	Brg.	Used				ES2	ET35										
CADILLAC — 1930-32																	
291	Brg.	Used				ES2	ET35										
CADILLAC — 1933																	
291	Brg.	Used				ES2	ET15										
CADILLAC — 1934-35																	
361	3611	3611	Right Hand Assembly			ES43	ET55										
			Left Hand Assembly			ES44	ET55										
CADILLAC — 1936																	
363	2421	2421	Right Hand Assembly			ES47	ET52										
363AX ♂ Complete King Pin Assembly			Left Hand Assembly			ES47 (Int. Rod Fact. Dup.)	ET52										
CADILLAC — 1936-38																	
381	Brg.	Used	Right Hand Assembly			ES43	ET55										
			Left Hand Assembly			ES44	ET55										
CADILLAC — 1937-38																	
392	3601	3601	Right Hand Assembly			ES59	ET63										
392AX ♂ Complete King Pin Assembly			Left Hand Assembly			ES59 (Int. Rod Fact. Dup.)	ET63										
CADILLAC — 1937-38																	
391	Brg.	Used	Right Hand Assembly			ES43	ET55										
			Left Hand Assembly			ES44	ET55										
CASE TRACTOR — 1929-36																	
405	4051	4051															
CHANDLER — 1926-29																	
221	1783	2214	Ball Type Used														
CHANDLER — 1927																	
206	2063	2064	Ball Type Used														
CHANDLER — 1926-29																	
174	1081	1081	Ball Type Used														
CHANDLER — 1927-29																	
221	1783	2214	Ball Type Used														
CHEVROLET — 1913-22																	
117	1171	1171	511	5112	None												
CHEVROLET — 1923																	
118	1181	1181	511	5112	None												

MODELS 341 AFTER ENG. 320002—CYLS. 8—AXLE OWN

Front	2	0327	0035	Front	2	0329	0037
Rear	4	0328	0035	Rear	2	0329	0037

MODELS 353—CYLS. 8—AXLE OWN

MODELS 355—CYLS. 8—AXLE OWN

MODELS 355B—CYLS. 8—AXLE OWN

MODELS 370—CYLS. 12—AXLE OWN

MODELS 370B—CYLS. 12—AXLE OWN

MODELS 452, 452B—CYLS. 16—AXLE OWN

MODELS 355C, 370C—CYLS. 8-12—AXLE OWN

MODELS 355D, 370D, 452D—CYLS. 8-12-16—AXLE OWN

Front	4	HB712
Rear	4	HB711

MODELS 36-60—CYLS. 8—AXLE OWN

Front	8	HB711

MODELS 36-70, 36-75, 36-80, 36-85, 37-75, 37-85, 38-75, 38-90—CYLS. 8-12, 16—AXLE OWN

Front	8	HB711

MODELS 60, 3860S, 3865 (160" W.B.)—CYLS. 8—AXLE OWN

MODELS 65, 70, 3865 (132" W. B.)—CYLS. 8—AXLE OWN

MODELS C, CO, L; CI, LI, INDUSTRIAL—CYLS. 4—AXLE OWN

MODELS BIG SIX—CYLS. 6—AXLE OWN

MODELS SPECIAL SIX—CYLS. 6—AXLE OWN

MODELS STANDARD SIX, 65, 8-75—CYLS. 6-8—AXLE OWN

MODELS 8-85—CYLS. 8—AXLE OWN

MODELS 490—CYLS. 4—AXLE OWN

MODELS SUPERIOR—CYLS. 4—AXLE OWN

Rear	2	0217	0034

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

CHEVROLET 1924-27

118 1181 1181 550 5112 None
2361SB 2361SB

CHEVROLET 1928-29

266 2661 2661 ES10 ET11
2661SB 2661SB RS28
266LP
♂ Lock Pin for 266 (See Footnote)
387☞.005 O.S. for 266
266AX (Complete King Pin Assembly)
387AX (Complete King Pin Assembly)

CHEVROLET 1930-32

266 2661 2661 ES23 ET11
2661SB 2661SB RS29
266LP (See Footnote)
♂ Lock Pin for 266
387☞.005 O.S. for 266
266AX (Complete King Pin Assembly)
387AX (Complete King Pin Assembly)

CHEVROLET 1933-35

343 3431 3431 ES23 ET6
3431SB 3431SB RS29
343AX (Complete King Pin Assembly) (See Footnote)

CHEVROLET 1933

266 2661 2661
2661SB 2661SB ES23 ET11
266LP RS29
♂ Lock Pin for 266 (See Footnote)
387☞.005 O.S. for 266
266AX (Complete King Pin Assembly)
387AX (Complete King Pin Assembly)

CHEVROLET 1934

351 Brg. Used
3516 3516 RS29
♂ Replaces Needle Bearings (See Footnote)
351AC (Complete King Pin Assembly)
M101☞Spindle Bushing

CHEVROLET 1935

266 2661 2661 RS29
266LP 2661SB 2661SB (See Footnote)
♂ Lock Pin for 266
387☞.005 O.S. for 266
266AX (Complete King Pin Assembly)
387AX (Complete King Pin Assembly)

CHEVROLET 1935-36

351 Brg. Used ES23 ET7
3516 3516 RS29
♂ Replaces Needle Bearings (See Footnote)
351AC (Complete King Pin Assembly)
M101☞Spindle Bushing

CHEVROLET 1936

266 2661 2661 RS29
266LP 2661SB 2661SB (See Footnote)
♂ Lock Pin for 266
387☞.005 O.S. for 266
266AX (Complete King Pin Assembly)
387AX (Complete King Pin Assembly)

CHEVROLET 1936

384 2661 2661 RS29
2661SB 2661SB (Int. Rod Fact. Dup.)
384AX (Complete King Pin Assembly)

CHEVROLET 1937-38

266 2665 2665 ES23 ET6
266LP (Lock Pin for 266) RS29
387 (.005 O.S. for 266) (See Footnote)
266AB (Complete King Pin Assembly)
387AB (Complete King Pin Assembly)

MODELS SUPERIOR—CYLS. 4—AXLE OWN

T701 T702	Front	2	0222	007	Front	2	0222	007
(See Footnote)	Rear Up.	2	0222	0052	Rear Up.	2	0222	0052
	Rear Lr.	2	0222	007	Rear Lr.	2	0222	007
	(Above Spring Bolts are Thompson Quality)							
	Front	2	0242	0064	Front	2	0242	0064
	Rear Up.	2	0242	0052	Rear Up.	2	0242	0052
	Rear Lr.	2	0242	0064	Rear Lr.	2	0242	0064
	(Above Spring Bolts are Factory Duplicate)							

MODELS AA, AB, SIX—CYLS. 4-6—AXLE OWN

T701 T702	Front	2	0222	007	Front	2	0222	007
(See Footnote)	Rear Up.	2	0222	0052	Rear Up.	2	0222	0052
	Rear Lr.	2	0222	007	Rear Lr.	2	0222	007
	(Above Spring Bolts are Thompson Quality)							
	Front	2	0242	0064	Front	2	0242	0064
	Rear Up.	2	0242	0052	Rear Up.	2	0242	0052
	Rear Lr.	2	0242	0064	Rear Lr.	2	0242	0064
	(Above Spring Bolts are Factory Duplicate)							

MODELS SIX—CYLS. 6—AXLE OWN

*T701 *T702	Front	2	0222	007	Front	2	0222	007
SU803 SU804	(Above Spring Bolts are Thompson Quality)							
	Front	2	0242	0064	Front	2	0242	0064
	(Above Spring Bolts are Factory Duplicate)							

MODELS STD. SIX, CC, DC, EC—CYLS. 6—AXLE OWN

*T701 *T702	Front	2	0336	007	Front	2	0337	007
SU803 SU804								

MODELS MASTER SIX—CYLS. 6—AXLE OWN

*T701 *T702	Front	2	0222	007	Front	2	0222	007
SU803 SU804	(Above Spring Bolts are Thompson Quality)							
	Front	2	0242	0064	Front	2	0242	0064
	(Above Spring Bolts are Factory Duplicate)							

MODELS MASTER SIX, DA—CYLS. 6—AXLE OWN

*T735 (Rear of Rear)					Front	2	0347	0090

MODELS MASTER SIX, ED (CONVENTIONAL AXLE)—CYLS. 6—AXLE OWN

*T736 (Front of Front)								
	Rear	2	0343	0089	Front	2	0347	0090
*T735 (Rear of Rear)								

MODELS MASTER SIX (KNEE ACTION)—CYLS. 6—AXLE OWN

*T735 (Rear of Rear)					Front	2	0347	0090

MODELS MASTER SIX (CONVENTIONAL AXLE)—CYLS. 6—AXLE OWN

*T736 (Front of Front)								
	Rear	2	0343	0089	Front	2	0347	0090
*T735 (Rear of Rear)								

MODELS STANDARD SIX FC—CYLS. 6—AXLE OWN

*T736 (Rear of Front)								
	Front	2	0349	7400	Front	2	0347	0090
*T735 (Rear of Rear)								

MODELS GB, HB MASTER—CYLS. 6—AXLE OWN

*T736 (Rear of Front)								
	Front	2	0349	7400	Front	2	0347	0090
*T735 (Rear of Rear)								

Footnote: To replace conventional shackles with Tryons it is necessary to enlarge the hole in the hanger for rear of front and the hole in the frame for rear of rear from .690 to .762 to accommodate Tryon Pins.

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

(6-1-38)

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

CHEVROLET 1937-38

351 3516 3516 — — — ES23 ET7
351AC (Complete King Pin Assembly) — RS29
M101 Spindle Bushing — (See Footnote)

CHEVROLET TRUCK 1923

118 1181 1181 511 5112 None

CHEVROLET TRUCK 1924-27

118 1181 1181 550 5112 None
2361SB 2361SB

CHEVROLET TRUCK 1928

266 2661 2661 — — — ES10 ET11
2661SB 2661SB — RS28
266LP — (See Footnote)
♂ Lock Pin for 266
266AX (Complete King Pin Assembly)

CHEVROLET TRUCK 1929

266 2661 2661 — — — ES10 ET11
2661SB 2661SB — RS28
266LP — (See Footnote)
♂ Lock Pin for 266
266AX (Complete King Pin Assembly)

CHEVROLET TRUCK 1930

266 2661 2661 — — — ES23 ET11
2661SB 2661SB — RS29
266LP — (See Footnote)
♂ Lock Pin for 266
266AX (Complete King Pin Assembly)

CHEVROLET TRUCK 1931-32

313 3131 3131 — — — ES23 ET11
313LP 3131SB 3131SB — RS29
♂ Lock Pin for 313 — (See Footnote)
365 .005 O.S. for 313
393 .010 O.S. for 313
313AX (Complete King Pin Assembly)
365AX (Complete King Pin Assembly)
393AX (Complete King Pin Assembly)

CHEVROLET TRUCK 1933

313 3131 3131 — — — ES23 ET11
313LP 3131SB 3131SB — RS29
♂ Lock Pin for 313 — (See Footnote)
365 .005 O.S. for 313
393 .010 O.S. for 313
313AX (Complete King Pin Assembly)
365AX (Complete King Pin Assembly)
393AX (Complete King Pin Assembly)

CHEVROLET TRUCK 1934

313 3131 3131 — — — RS29
313LP 3131SB 3131SB — (See Footnote)
♂ Lock Pin for 313
365 .005 Oversize for 313
393 .010 O.S. for 313
313AX (Complete King Pin Assembly)
365AX (Complete King Pin Assembly)
393AX (Complete King Pin Assembly)

CHEVROLET TRUCK 1934-36

266 2661 2661 — — — ES23 ET6
266LP 2661SB 2661SB — RS29
♂ Lock Pin for 266 — (See Footnote)
387 (.005 O.S. for 266)
266AX (Complete King Pin Assembly)
387AX (Complete King Pin Assembly)

CHEVROLET TRUCK 1935-36

313 3131 3131 — — — RS26 RT38
313LP 3131SB 3131SB
♂ Lock Pin for 313 — (Int. Rod Fact. Dup.)
365 (.005 O.S. for 313)
393 (.010 O.S. for 313)
313AX (Complete King Pin Assembly)
365AX (Complete King Pin Assembly)
393AX (Complete King Pin Assembly)

CHEVROLET TRUCK 1937-38

266 2661 2661 — — — ES23 ET6
266LP 2661SB 2661SB — RS29
♂ Lock Pin for 266 — (See Footnote)
387 (.005 O.S. for 266)
266AX (Complete King Pin Assembly)
387AX (Complete King Pin Assembly)

MODELS GA, HA MASTER—CYLS. 6—AXLE OWN

*T735 (Rear of Rear) — Front 2 0347 0090

MODELS ¾, 1 T—CYLS. 4—AXLE OWN

MODELS ½, 1 T—CYLS. 4—AXLE OWN

MODELS ½, 1 T—CYLS. 4—AXLE OWN

MODELS LQ, LR, LS, 1½ T—CYLS. 6—AXLE OWN

Front 2 0222 007 — Front 2 0259
Rear Up. 2 0222 0052 — Rear 4 0259
Rear Lr. 2 0222 007

MODELS LQ, LR, LS, 1½ T—CYLS. 6—AXLE OWN

*T701 Front 2 0222 007 — Front 2 0259
SU803 — Rear 4 0259

MODELS LT, M, N, 1½ T—CYLS. 6—AXLE OWN

*T701 Front 2 0222 007 — Front 2 0259
SU803 — Rear 4 0259

MODELS O, 1½ T—CYLS. 6—AXLE OWN

*T701 Front 2 0222 007 — Front 2 0338 0042
SU803 — Rear 4 0338 0042

MODELS P, 1½ T—CYLS. 6—AXLE OWN

*T736 (Fr. of Fr.) Rear 2 0343 0089 — Front 2 0338 0042
Rear 4 0338 0042

MODELS DB, EB, FB, ½T—CYLS. 6—AXLE OWN

*T736 (Front of Front)
Rear 2 0343 0089 — Front 2 0343 0089
*T735 (Rear of Rear)

MODELS Q, R, 1½T—CYLS. 6—AXLE OWN

*T736 (Front of Front)
Rear 2 0343 0089 — Front 2 0338 0042
Rear 4 0338 0042

MODELS GC, HC, HD, HE, ½, ¾, 1 T—CYLS. 6—AXLE OWN

*T736 (Front of Front)
Rear 2 0348 0089 — Front 2 0348 0089
*T735 (Rear of Rear)

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES	
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring

SPRING BOLTS AND BUSHINGS							
FRONT SPRING				REAR SPRING			
Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

CHEVROLET TRUCK 1937-38

313 3131 3131 RS26 RT38
313LP 3131SB 3131SB
♂ Lock Pin for 313 (Int. Rod Fact. Dup.)
365 (.005 O.S. for 313)
393 (.010 O.S. for 313)
313AX (Complete King Pin Assembly)
365AX (Complete King Pin Assembly)
393AX (Complete King Pin Assembly)

CHEVROLET BUS 1937

322 3221 3221

CHICAGO TRUCK 1931

328 3281 3281

CHRYSLER 1925

129 1521 1521 516 5162 None

CHRYSLER 1926

164 1641 1641 ES9 ET12
1641SB 1641SB

CHRYSLER 1926

164 1641 1641 ES9 ET12
1641SB 1641SB

CHRYSLER 1927-29

226 2071 2071 ES8 ET4

CHRYSLER 1924-25

164 1641 1641 Ball Type Used
1641SB 1641SB

CHRYSLER 1926-27

164 1641 1641 ES9 ET12
1641SB 1641SB

CHRYSLER 1926-28

164 1641 1641 ES9 ET12
1641SB 1641SB

CHRYSLER 1929

282 1641 2824 ES9 ET12
1641SB

CHRYSLER 1930-31

278 2071 2781 ES8 ET6
278AX (Complete King Pin Assembly)

CHRYSLER 1930

282 1641 2824 ES9 ET2
1641SB

CHRYSLER 1928

164 1641 1641 ES9 ET12
1641SB 1641SB

CHRYSLER 1926-28

225 2251 2251 Ball Type Used

CHRYSLER 1929-30

306 3063 3064 Ball Type Used

CHRYSLER 1931

278 2071 2781 ES7 ET9
278AX (Complete King Pin Assembly)

CHRYSLER 1931

311 2101 2824 ES8 ET6
311AX (Complete King Pin Assembly)

CHRYSLER 1931

312 3123 2824 ES9 ET2
312AX (Complete King Pin Assembly)

CHRYSLER 1932

278 2071 2781 ES7 ET9
278AX (Complete King Pin Assembly)

CHRYSLER 1932

311 2101 2824 ES8 ET6
311AX (Complete King Pin Assembly)

MODELS S, T, 1½ T—CYLS. 6—AXLE OWN

*T736 (Front of Front)

Rear	2	0348	0089	Front	2	0338	0042
				Rear	4	0338	0042

MODELS BUS—CYLS. 6—AXLE TIMKEN

MODELS 1-18A, 2 T—CYLS. 6—AXLE TIMK. 12703H

MODELS ALL—CYLS. 4—AXLE OWN

Front	2	0132	0022	Front	2	0129	0034
Rear	4	0130	0022	Rear	4	0131	0034

MODELS 58—CYLS. 4—AXLE OWN

Front	2	0132	0022	Front	2	0129	0034
Rear	4	0130	0022	Rear	3	0131	0034

MODELS 58 ROADSTER—CYLS. 4—AXLE OWN

Front	2	0245	0022	Front	2	0129	0034
Rear	4	0130	0022	Rear	4	0131	0034

MODELS 50, 52—CYLS. 4—AXLE OWN

Front	2	0243	0065	Front	2	0244	0066
Rear	4	0243	0065	Rear	4	0243	0065

MODELS 70—CYLS. 6—AXLE OWN

Front	2	0130	0018	Front	2	0132	0022
Rear	4	0130	0018	Rear	4	0132	0022

MODELS 70—CYLS. 6—AXLE OWN

Front	2	0130	0018	Front	2	0132	0022
Rear	4	0130	0018	Rear	4	0132	0022

MODELS 60, 62—CYLS. 6—AXLE OWN

Front	2	0132	0022	Front	2	0129	0034
Rear	4	0130	0022	Rear	4	0131	0034

MODELS 65, 75—CYLS. 6—AXLE OWN

MODELS 66, SIX—CYLS. 6—AXLE OWN

MODELS 70, 77—CYLS. 6—AXLE OWN

MODELS 72—CYLS. 6—AXLE OWN

MODELS IMPERIAL 80—CYLS. 6—AXLE OWN

MODELS IMPERIAL 80—CYLS. 6—AXLE OWN

MODELS SIX—CYLS. 6—AXLE OWN

*T721 *T709
SU805 SU806

MODELS EIGHT, CD, DE LUXE 8—CYLS. 8—AXLE OWN

MODELS IMPERIAL 8—CYLS. 8—AXLE OWN

MODELS CI—CYLS. 6—AXLE OWN

*T723 *T709
SU807 SU806

MODELS CP—CYLS. 8—AXLE OWN

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

CHRYSLER 1932
312 3123 2824 ES6 ET34

CHRYSLER 1933
278 2071 2781 ES7 ET9
278AX (Complete King Pin Assembly)

CHRYSLER 1933
282 2101 3414 ES8 ET6

CHRYSLER 1933
282 2101 3414 ES8 ET6

CHRYSLER 1934
357 3573 3574 Right Hand Assembly ☞ES35 ET50
Left Hand Assembly ☞ES36 ET50
(Int. Rod Fact. Dup.)

CHRYSLER 1934
362 3623 3624 ES49
(See Footnote)

CHRYSLER 1934
362 3623 3624 ES49
(See Footnote)

CHRYSLER 1935
355 3701 3701 Right Hand Assembly ☞ES35 ET50
355AX
♂ Complete King Pin Assembly Left Hand Assembly ☞ES36 ET50
(Int. Rod Fact. Dup.)

CHRYSLER 1935
368 3683 3684 Right Hand Assembly ☞ES35 ET50
368AX
♂ Complete King Pin Assembly Left Hand Assembly ☞ES36 ET50

CHRYSLER 1935
369 3693 3694 ES49
(See Footnote)

CHRYSLER 1935
369 3693 3694 ES49
(See Footnote)

CHRYSLER 1936
355 3701 3701 Long Rod Assy. Right Side ☞ES53
355AX
♂ Complete King Pin Assembly Short Rod Assy. Left Side ☞ES54
(See Footnote)

CHRYSLER 1936
368 3683 3684 Long Rod Assy. Right Side ☞ES53
368AX
♂ Complete King Pin Assembly Short Rod Assy. Left Side ☞ES54
(See Footnote)

CHRYSLER 1936
369 3693 3694 ES49
(See Footnote)

CHRYSLER 1936-37
369 3693 3694 ES49
(See Footnote)

CHRYSLER 1937-38
355 3701 3701 Right Hand Assembly ☞ES60
355AX
♂ Complete King Pin Assembly Left Hand Assembly ☞ES61
(See Footnote)

CHRYSLER 1937-38
368 3683 3684 Right Hand Assembly ☞ES60
368AX
♂ Complete King Pin Assembly Left Hand Assembly ☞ES61
(See Footnote)

MODELS CH, CL—CYLS. 8—AXLE OWN

MODELS CO—CYLS. 6—AXLE OWN
*SU814 *SU811

MODELS CT, ROYAL—CYLS. 8—AXLE OWN
*SU814 *SU811

MODELS CQ, IMPERIAL—CYLS. 8—AXLE OWN

MODELS CA, CB—CYLS. 6—AXLE OWN
*SU811 (Rear of Rear) Front 2 0344 0091

MODELS CU, AIRFLOW—CYLS. 8—AXLE OWN
*SU829 *SU828

MODELS CV, AIRFLOW—CYLS. 8—AXLE OWN
*SU831 *SU832

MODELS AIRSTREAM, C6,—CYLS. 6—AXLE OWN
*SU835 (Rear of Rear) Front 2 0344 0091

MODELS AIRSTREAM, CZ—CYLS. 8—AXLE OWN
*SU835 (Rear of Rear) Front 2 0344 0091
(Int. Rod Fact. Dup.)

MODELS AIRFLOW, C1—CYLS. 8—AXLE OWN
*SU829 *SU828

MODELS AIRFLOW, C2, C3—CYLS. 8—AXLE OWN
*SU831 *SU832

MODELS C7 AIRSTREAM—CYLS. 6—AXLE OWN
*SU841 (Rear of Rear) Front 2 0344 0091

MODELS C8 AIRSTREAM—CYLS. 8—AXLE OWN
*SU841 (Rear of Rear) Front 2 0344 0091

MODELS C9, AIRFLOW—CYLS. 8—AXLE OWN
*SU829 *SU828

MODELS C10, C11, C17, AIRFLOW—CYLS. 8—AXLE OWN
*SU831 *SU832

MODELS C16, C18 ROYAL—CYLS. 6—AXLE OWN
*SU835 (Rear of Rear, Right Side) Front 2 0345 0091
*SU845 (Rear of Rear, Left Side)

MODELS C14, C19 IMPERIAL—CYLS. 8—AXLE OWN
*SU835 (Rear of Rear, Right Side) Front 2 0345 0091
*SU845 (Rear of Rear Left Side)

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

CHRYSLER 1937-38

369 3693 3694 — Right Hand Assembly — ES52 — ET63
Left Hand Assembly — ES52 — ET63
(Int. Rod Fact. Dup.)

MODELS C15, C20 IMPERIAL CUSTOM—CYLS. 8—AXLE OWN
*SU831 (Rear of Rear, Right Side)
*SU851 (Rear of Rear, Left Side)

CLARK AXLE 1930-34
276 2761 2761

MODELS 208, 208B, F208, F212A—AXLE OWN

CLARK AXLE 1934-38
414 4141 4141

MODELS F264, F266, F280—AXLE OWN

CLARK AXLE 1931-35
275 2751 2751

MODELS F308—AXLE OWN

CLEVELAND 1925-26
206 2063 2064 — Ball Type Used

MODELS 43—CYLS. 6—AXLE OWN

CLEVELAND 1925-26
174 1081 1081 — Ball Type Used

MODELS 31—CYLS. 6—AXLE OWN

CONTINENTAL 1933
222 1601 1601 — RS26 — RT39
(Int. Rod Fact. Dup.)

MODELS ACE—CYLS. 6—AXLE TIMK.

CORBITT TRUCK 1928-29
328 3281 3281

MODELS 630, 1½ T—CYLS. 6—AXLE TIMK. 12703H

CORBITT TRUCK 1932-35
322 3221 3221

MODELS B6, B7, B9, 9B6T, 10B6T, 1½-6T—CYLS. 6—AXLE TIMKEN

CORBITT TRUCK 1931-35
403 4031 4031

MODELS B12B6, 15B6T, 12W6, 15W6, 2-8 T—CYLS. 6—AXLE TIMKEN

CORBITT TRUCK 1932-35
402 4021 4021

MODELS 18D6T, 28SW64R—CYLS. 6—AXLE TIMKEN

DAY-ELDER TRUCK 1929-30
328 3281 3281

MODELS GF, 110, 1½, 2 T—CYLS. 6—AXLE TIMK. 12703H

DAY-ELDER TRUCK 1930-35
322 3221 3221

MODELS 60, 75, 85, 110, 150, 1-3 T—CYLS. 6—AXLE TIMKEN

DAY-ELDER TRUCK 1931-35
403 4031 4031

MODELS 130, 160, 2½-3½ T—CYLS. 6—AXLE TIMK.

DAY-ELDER TRUCK 1931-35
402 4021 4021

MODELS 200, 4 T—CYLS. 6—AXLE TIMKEN

DEERE TRACTOR 1931-36
408 4081 4081

MODELS D AFTER NO. 109943—CYLS. 2—AXLE OWN

DE SOTO 1929-30
278 2071 2781 — ES8 — ET4
278AX (Complete King Pin Assembly)

MODELS SIX—CYLS. 6—AXLE OWN
*T705 *T708 Front 2 0243 007 Front 2 0244 0014
SU808 SU807

DE SOTO ..... (TO APRIL 15, 1931)
278 2071 2781 — ES7 — ET9
278AX (Complete King Pin Assembly)

MODELS SIX—CYLS. 6—AXLE OWN
*T721 *T709
SU805 SU806

DE SOTO ..... (AFTER APRIL 15, 1931)
278 2071 2781 — ES7 — ET9
278AX (Complete King Pin Assembly)

MODELS SIX—CYLS. 6—AXLE OWN
*T722 *T709
SU808 SU806

DE SOTO 1930-31
278 2071 2781 — ES8 — ET4
278AX (Complete King Pin Assembly)

MODELS STRAIGHT EIGHT—CYLS. 8—AXLE OWN

DE SOTO 1932
278 2071 2781 — ES7 — ET9
278AX (Complete King Pin Assembly)

MODELS SC—CYLS. 6—AXLE OWN
*T723 *T709
SU807 SU806

DE SOTO 1933
278 2071 2781 — ES50
278AX (Complete King Pin Assembly)
(See Footnote)

MODELS SD—CYLS. 6—AXLE OWN
*SU814 *SU811

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.
(6-1-38)

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

DE SOTO 1934

358 3573 3584 — — — ES50 (See Footnote) — — — — — — — — — —

DE SOTO 1935

355 3701 3701 — — — Right Hand Assembly ES35 ET50
355AX — — — — — — — — — —
♂ Complete King Pin Assembly — — — — — — Left Hand Assembly ES36 ET50 (Int. Rod Fact. Dup.)

DE SOTO 1935

368 3683 3684 — — — ES50 — — — — — — — — — —
368AX (Complete King Pin Assembly) — — — — — — (See Footnote) — — — — — — — — — —

DE SOTO 1936

355 3701 3701 — — — Long Rod Assy. — — — — — — — — — —
355AX — — — — — — Right Side ES53 — — — — — — — — — —
♂ Complete King Pin Assembly — — — — — — Short Rod Assy. Left Side ES54 (See Footnote) — — — — — — — — — —

DE SOTO 1936

368 3683 3684 — — — ES50 — — — — — — — — — —
368AX (Complete King Pin Assembly) — — — — — — (See Footnote) — — — — — — — — — —

DE SOTO 1937-38

355 3701 3701 — — — Right Hand Assembly ES60
355AX — — — — — — — — — —
♂ Complete King Pin Assembly — — — — — — Left Hand Assembly ES61 (See Footnote)

DE VAUX 1931-32

222 1601 1601 — — — ES7 ET7 — — — — — — — — — —

DIAMOND T TRUCK 1920-23

202 None 2022 551 5513 5514 — — — — — — — — — —

DIAMOND T TRUCK 1923

203 2032 2032 551 5513 5514 — — — — — — — — — —

DIAMOND T TRUCK 1930

328 3281 3281 — — — — — — — — — — — — — —

DIAMOND T TRUCK 1932-33

275 2751 2751 — — — — — — — — — — — — — —

DIAMOND T TRUCK 1930-33

276 2761 2761 — — — — — — — — — — — — — —

DIAMOND T TRUCK 1931-35

275 2751 2751 — — — — — — — — — — — — — —

DIAMOND T TRUCK 1934-35

414 4141 4141 — — — — — — — — — — — — — —

DIANA 1926-27

196 1961 1961 Ball Type Used — — — — — — — — — — — — — —

DODGE 1915-19

120 1201 1201 540 5402 None — — — — — — — — — —

DODGE 1919-22

161 1161B 1161S 1161B 1161S 539 5392 None — — — — — — — — — —

DODGE 1923-24

116 1161B 1161S 1161B 1161S 539 5392 None — — — — — — — — — —

DODGE 1925-28

194 1941 1941 539 5392 None — — — — — — — — — —

MODELS SE AIRFLOW—CYLS. 6—AXLE OWN

*SU828 *SU811 — — — — — — — — Front 2 0344 0091

MODELS SF, AIRSTREAM—CYLS. 6—AXLE OWN

*SU835 (Rear of Rear) — — — — — — — — Front 2 0344 0091

MODELS SG, AIRFLOW—CYLS. 6 AXLE OWN

*SU828 *SU811 — — — — — — — — Front 2 0344 0091

MODELS S1, AIRSTREAM—CYLS. 6—AXLE OWN

*SU841 (Rear of Rear) — — — — — — — — Front 2 0344 0091

MODELS S2, AIRFLOW—CYLS. 6—AXLE OWN

*SU828 *SU811 — — — — — — — — Front 2 0344 0091

MODELS S3, S5—CYLS. 6—AXLE OWN

*SU835 (Rear of Rear, Right Side)
*SU845 (Rear of Rear, Left Side)

MODELS 6-75—CYLS. 6—AXLE OWN

*T701 *T702
SU803 SU804

MODELS K, EL, 3½, 5 T—CYLS. 4—AXLE TIMK.

MODELS S, 5 T—CYLS. 4—AXLE TIMK. 1730

MODELS 303, 2 T—CYLS. 6—AXLE TIMK. 12703H

MODELS 311, 311FF—CYLS. 6—AXLE CLARK

MODELS 200, 210, 210FF, 210SF, 211, 211FF, 215, 216, 225, 260—CYLS. 6—AXLE CLARK

MODELS 243, 303, 310, 311B, 312, 350, 375, 475—CYLS. 6—AXLE CLARK F308

MODELS 211A, 220, 226, 227, 242, 1½-2 T—AXLE CLARK

MODELS STRAIGHT EIGHT—CYLS. 8—AXLE SALIS

MODELS ALL—CYLS. 4—AXLE OWN

Front 2 0170 001 Front 2 0171 0010
Rear Up. 2 0170 003 Rear 4 0172 002
Rear Lr. 2 0170 001

MODELS ALL—CYLS. 4—AXLE OWN

Front 2 0170 001 Front 2 0171 0010
Rear Up. 2 0170 003 Rear 4 0172 002
Rear Lr. 2 0170 001

MODELS ALL—CYLS. 4—AXLE OWN

Front 2 0170 001 Front 2 0171 0010
Rear Up. 2 0170 003 Rear 4 0172 002
Rear Lr. 2 0170 001

MODELS ALL, 124—CYLS. 4—AXLE OWN

Front 2 0173 0010 Front 2 0175 0015
Rear Up. 2 0173 0010 Rear 4 0173 0010
Rear Lr. 2 0174 0010
(Above Spring Bolts are Thompson Quality)
Front 2 0246 0010 Front 2 0248 0010
Rear Up. 2 0246 0010 Rear 4 0246 0010
Rear Lr. 2 0247 0010
(Above Spring Bolts are Factory Duplicate)

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

Do-Do Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

DODGE — 1927-28

194 2653 2654 539 5162 None
2653SB 2654SB

DODGE — 1927-28

194 2653 2654 ES3 ET3
2653SB 2654SB (Int. Rod Fact. Dup.)

DODGE — 1928

260 2601 2601 ES3 ET3
2601SB 2601SB
260A (Assembly-King Pins and Bushings)

DODGE — 1928

260 2601 2601 ES3 ET3
2601SB 2601SB
260A (Assembly-King Pins and Bushings)

DODGE — 1929

260 2601 2601 ES3 ET3
2601SB 2601SB
260A (Assembly-King Pins and Bushings)

DODGE — 1930

278 2071 2781 ES7 ET9
278AX (Complete King Pin Assembly)

DODGE — 1928

255 1641 1641 ES4 ET2
1641SB 1641SB

DODGE — 1929

255 1641 1641 ES4 ET2
1641SB 1641SB

DODGE — 1930

278 2071 2781 ES7 ET9
278AX (Complete King Pin Assembly)

DODGE — (TO MARCH 15, 1931)

278 2071 2781 ES7 ET9
278AX (Complete King Pin Assembly)

DODGE — (AFTER MARCH 15, 1931)

278 2071 2781 ES7 ET9
278AX (Complete King Pin Assembly)

DODGE — 1931

278 2071 2781 ES7 ET9
278AX (Complete King Pin Assembly)

DODGE — 1932

278 2071 2781 ES7 ET9
278AX (Complete King Pin Assembly)

DODGE — 1932

311 2101 2824 ES7 ET9
311AX (Complete King Pin Assembly)

MODELS 129 TO CAR NO. A998614—CYLS. 4—AXLE OWN

Front	2	0252	0018	Front	2	0263	0034
Rear Up.	2	0252	0067	Rear Up.	2	0173	0010
Rear Lr.	2	0252	0018	Rear Lr.	2	0173	0022
(Above Spring Bolts are Thompson Quality)							
Front	2	0260	0018	Front	2	0262	0034
Rear Up.	2	0260	0067	Rear Up.	2	0246	0010
Rear Lr.	2	0260	0018	Rear Lr.	2	0246	0022
(Above Spring Bolts are Factory Duplicate)							

MODELS 126, 129 AFTER NO. A998614—CYLS. 4—AXLE OWN

Front	2	0252	0018	Front	2	0263	0034
Rear Up.	2	0252	0067	Rear Up.	2	0173	0010
Rear Lr.	2	0252	0018	Rear Lr.	2	0173	0022
(Above Spring Bolts are Thompson Quality)							
Front	2	0260	0018	Front	2	0262	0034
Rear Up.	2	0260	0067	Rear Up.	2	0246	0010
Rear Lr.	2	0260	0018	Rear Lr.	2	0246	0022
(Above Spring Bolts are Factory Duplicate)							

MODELS SERIES 128, STD. SIX—CYLS. 4-6—AXLE OWN

Front	2	0252	0018	Front	2	0263	0034
Rear Up.	2	0252	0067	Rear Up.	2	0173	0010
Rear Lr.	2	0252	0018	Rear Lr.	2	0173	0022
(Above Spring Bolts are Thompson Quality)							
Front	2	0260	0018	Front	2	0262	0034
Rear Up.	2	0260	0067	Rear Up.	2	0246	0u10
Rear Lr.	2	0260	0018	Rear Lr.	2	0246	0022
(Above Spring Bolts are Factory Duplicate)							

MODELS VICTORY SIX—CYLS. 6—AXLE OWN

Front	2	0252	0018	Front	2	0253	0034
Rear Up.	2	0252	0067	Rear Up.	2	0173	0010
Rear Lr.	2	0252	0018	Rear Lr.	2	0173	0022
(Above Spring Bolts are Thompson Quality)							
Front	2	0260	0018	Front	2	0261	0034
Rear Up.	2	0260	0067	Rear Up.	2	0246	0010
Rear Lr.	2	0260	0018	Rear Lr.	2	0246	0022
(Above Spring Bolts are Factory Duplicate)							

MODELS DA SIX—CYLS. 6—AXLE OWN

Front	2	0252	0018	Front	2	0253	0034
Rear Up.	2	0130	0067	Rear Up.	2	0132	0010
Rear Lr.	2	0130	0018	Rear Lr.	2	0132	0022

MODELS DD SIX—CYLS. 6—AXLE OWN

*T705 *T708 Front 2 0243 007 Front 2 0244 0014
SU808 SU807

MODELS SENIOR SIX—CYLS. 6—AXLE OWN

Front	2	0173	0022	Front	2	0175	0026
Rear Up.	2	0173	0010	Rear Up.	2	0173	0010
Rear Lr.	2	0174	0022	Rear Lr.	2	0173	0022
(Above Spring Bolts are Thompson Quality)							
Front	2	0246	0022	Front	2	0248	0026
Rear Up.	2	0246	0010	Rear Up.	2	0246	0010
Rear Lr.	2	0247	0022	Rear Lr.	2	0246	0022
(Above Spring Bolts are Factory Duplicate)							

MODELS SENIOR SIX—CYLS. 6—AXLE OWN

Front	2	0173	0022	Front	2	0330	0045
Rear Up.	2	0173	0010	Rear Up.	2	0173	0010
Rear Lr.	2	0174	0022	Rear Lr.	2	0173	0022

MODELS DC—CYLS. 8—AXLE OWN

MODELS DH SIX—CYLS. 6—AXLE OWN

*T706 *T723
SU808 SU807

MODELS DH SIX—CYLS. 6—AXLE OWN

*T708 *T723
SU807 SU807

MODELS DG EIGHT—CYLS. 8—AXLE OWN

MODELS DL—CYLS. 6—AXLE OWN

*T706 *T723
SU808 SU807

MODELS DK—CYLS. 8—AXLE OWN

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.
(6-1-28)

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES	
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring

DODGE 1933

282 2101 3414 — ES50 (See Footnote)

DODGE 1933

337 3371 3371 — RS34 ET9
337AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

DODGE 1934

354 3541 3541 Right Hand Assembly ☞ES35 ET50
354AX ♂Complete King Pin Assembly Left Hand Assembly ☞ES36 ET50
ES35R Also used on Drag Link End. (Int. Rod Fact. Dup.)

DODGE 1934

355 3541 3541 Right Hand Assembly ☞ES35 ET50
355AX ♂Complete King Pin Assembly Left Hand Assembly ☞ES36 ET50
ES35R Also used on Drag Link End. (Int. Rod Fact. Dup.)

DODGE 1935

370 3701 3701 — ES57 ET6
370AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)
ES35R Also used on Drag Link End.

DODGE 1936

370 3701 3701 — ES57 ET6
370AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)
ES70R Also used on Drag Link End

DODGE 1937

370 3701 3701 — ES57 ET64
370AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)
ES70R Also Used on Drag Link End.

DODGE 1938

370 3705 3701 — ES57 ET6
♂Needle Bearing (Int. Rod Fact. Dup.)
370AB (Complete King Pin Assembly)
ES70R Drag Link End used with 16x6.00 and 16x6.50 Wheels

DODGE TRUCK 1923-24

116 1161S 1161S 1161B 1161B 539 5392 None

DODGE TRUCK 1924-27

247 2471 2471 Ball Type Used

DODGE TRUCK .....

247 2741 2741

DODGE TRUCK .....

194 2653 2653 539 5392 None

DODGE TRUCK .....

276 2761 2761 — ES6 ET29

DODGE TRUCK .....

275 2751 2751 — ES6 ET14

DODGE TRUCK .....

278 2071 2781 — ES7 ET9
278AX (Complete King Pin Assembly)

DODGE TRUCK .....

312 3123 2824 — ES9 ET12
312AX (Complete King Pin Assembly)

SPRING BOLTS AND BUSHINGS							
FRONT SPRING					REAR SPRING				
Position	No. Used	Bolt	Bush.		Position	No. Used	Bolt	Bush.

MODELS DO—CYLS. 8—AXLE OWN

MODELS DP, DQ—CYLS. 6—AXLE OWN

*SU812 *SU813 Front 2 0346 0092 Front 2 0346 0092

MODELS DR TO 3681755, DS TO 4528655—CYLS. 6—AXLE OWN

*SU811 (Rear of Rear) Front 2 0344 0091

MODELS DR AFTER 3681755, DS AFTER 4528655—CYLS. 6—AXLE OWN

*SU811 (Rear of Rear) Front 2 0344 0091

MODELS DU—CYLS. 6—AXLE OWN

*SU833 (Right Side)
*SU834 (Left Side) Front 2 0344 0091
*SU835 (Rear of Rear)

MODELS D2—CYLS. 6—AXLE OWN

*SU810 (Front of Front, Right Side)
*SU838 (Front of Front, Left Side)
*SU839 (Rear of Front, Left Side)
*SU835 (Rear of Rear) Front 2 0344 0091
(Rear of Front Right Side) 1 0350 0093

MODELS D5—CYLS. 6—AXLE OWN

*SU810 (Front of Front, Right Side)
*SU838 (Front of Front, Left Side)
*SU844 (Rear of Front, Left Side)
*SU835 (Rear of Rear, Right Side)
*SU845 (Rear of Rear, Left Side) Front 2 0345 0091
(Rear of Front Right Side 1 0350 0093

MODELS D8—CYLS. 6—AXLE OWN

*SU810 (Front of Front, Right Side)
*SU838 (Front of Front, Left Side)
*SU844 (Rear of Front, Left Side)
*SU835 (Rear of Rear, Right Side)
*SU845 (Rear of Rear, Left Side)

MODELS ABC SERIES TO FRAME NO. E39086, D73548. S100001—CYLS. 4—AXLE OWN

MODELS ABC SERIES AFTER FRAME NO. E39086. D73548. S100001—CYLS. 4—AXLE OWN

MODELS ED, EF, LD, JD, YD, MD, OD, TD—CYLS. 6—AXLE OWN

MODELS SD—CYLS. 4—AXLE OWN

MODELS DA-120, DA-140—CYLS. 6—AXLE OWN

Front	2	0289	0034	Front	2	0293	0037
Rear Up.	2	0290	0029	Rear Up.	2	0293	0029
Rear Lr.	2	0290	0034	Rear Lr.	2	0294	0037

MODELS GE, HE, LE, ME, OE, RE, TE, 2 TON—150, 2 TON—160, 3 TON—135, 3 TON—165, 3 TON—185, JE, YE—CYLS. 6—AXLE OWN

MODELS MERCHANTS EXPRESS—CYLS. 4—AXLE OWN

*T705 *T708 Front 2 0243 007 Front 2 0244 0014

MODELS U-124, DA-124 (WOOD WHEELS)—CYLS. 6—AXLE OWN

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

Do-Do Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

DODGE TRUCK

306 3063 2824 — ES9 ET12

DODGE TRUCK

306 3063 3064 — Ball Type Used

DODGE TRUCK — 1931-32

278 2071 2781 — ES50
278AX (Complete King Pin Assembly) — (See Footnote)

DODGE TRUCK — 1931-32

278 2071 2781 — ES35
278AX (Complete King Pin Assembly) — (See Footnote)

DODGE TRUCK

312 3123 2824 — ES6 ET34
312AX (Complete King Pin Assembly)

DODGE TRUCK

324 3241 3241 — ES6 ET34

DODGE TRUCK — 1931

325 3251 3251 — ES51 (See Footnote)

DODGE TRUCK — 1931

325 3251 3251 — ES51 (See Footnote)

DODGE TRUCK — 1932-33

325 3251 3251 — ES51 (See Footnote)

DODGE TRUCK — 1931

348 3251 3251 — ES51 (See Footnote)

DODGE TRUCK — 1931

348 3251 3251 — ES51 (See Footnote)

DODGE TRUCK — 1931

DODGE TRUCK — 1932-33

348 3251 3251 — ES51 (See Footnote)

DODGE TRUCK — 1933-34

337 3371 3371 — ES35
337AX (Complete King Pin Assembly) — (See Footnote)

DODGE TRUCK — 1932-33

311 2101 2824 — ES50
311AX (Complete King Pin Assembly) — (See Footnote)

DODGE TRUCK — 1932-36

311 2101 2824 — ES50
311AX (Complete King Pin Assembly) — (See Footnote)

MODELS U-124, DA-124 (STEEL WHEELS)—CYLS. 6—AXLE OWN

MODELS U-133, DA-133—CYLS. 6—AXLE OWN

MODELS UF-10 TO NO. 8002596, F-10 TO NO. 8101140—CYLS. 4-6—AXLE OWN

*T705 *T708	Front	2	0243	007	Front	2	0244	0014

MODELS UF-10 AFTER NO. 8002596, F-10 AFTER NO. 8101140—CYLS. 4-6—AXLE OWN

MODELS UF-30, UF-31, F-30, F-31—CYLS. 4-6—AXLE OWN

Front Up.	2	0353	0053	Front	2	0354	0037
Front Lr.	2	0353	0034	Rear Up.	2	0354	0078
Rear	2	0353	0034	Rear Lr.	2	0354	0037

MODELS F-35, F-36, F-37—CYLS. 6—AXLE OWN

MODELS F-40, F-41, F-42 TO NO. 8700955, FROM NO. 8700977 TO NO. 8701000, TO NO. 9175207—CYLS. 6—AXLE OWN

MODELS F-60, F-61, F-62 TO NO. 8760917, FROM NO. 8760932 TO NO. 8760946, FROM NO. 8760975 TO NO. 8761040, TO NO. 9182668—CYLS. 6—AXLE OWN

MODELS 80, 81, 83, 85 TO NO. 8820008, AFTER NO. 8820019—CYLS. 6—AXLE OWN

MODELS F-40, F-41, F-42 FROM NO. 8700955 TO NO. 8700977, AFTER NO. 8701000, AFTER NO. 9175207—CYLS. 6—AXLE OWN

MODELS F-60, F-61, F-62 FROM NO. 8760917 TO NO. 8760932, FROM NO. 8760946 TO NO. 8760975, AFTER NO. 8761040, AFTER NO. 9182668—CYLS. 6—AXLE OWN

MODELS F-40, F-41, F-42, F-60, F-61, F-62—CYLS. 6—AXLE OWN

Front	2	0351	0094	Front	2	0352	0095
Rear	4	0351	0094	Rear	4	0352	0095

MODELS 80, 81, 83, 85 FROM NO. 8820008 TO NO. 8820019—CYLS. 6—AXLE OWN

MODELS HC, HCL, KC, KCL—CYLS. 6—AXLE OWN

*SU812 *SU813	Front	2	0346	0092	Front	2	0346	0092

MODELS H20, H21, H30, H31, 1½T—CYLS. 6—AXLE OWN

*T706 ♂Front of Front	Rear	2	0356	0018	Front	2	0357	0031
					Rear Up.	2	0357	0075
					Rear Lr.	2	0357	0031

MODELS UG-30, UG-31, G-30, G-31, H-30, H-31, K30, K31, K32, K33, K34, KH30, KH31, KH32, KH33, K20, K21, KH15, KH16, KH17, KH18, KH20, KH21, KH22, KH23, KH31V, KH32V, KH33V, KH34V—CYLS. 4-6

*T706 ♂Front of Front	Rear	2	0356	0018	Front	2	0357	0031
					Rear Up.	2	0357	0075
					Rear Lr.	2	0357	0031

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

DODGE TRUCK 1934

312 3123 2824 ES6 ET34
312AX (Complete King Pin Assembly)

DODGE TRUCK 1934-35

348 3251 3251 ES51 (See Footnote)

DODGE TRUCK 1935-36

312 3123 2824 ES6 ET34
312AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

DODGE TRUCK 1935-36

355 3701 3701 ES35 (See Footnote)
355AX (Complete King Pin Assembly)

DODGE TRUCK 1935-36

383 3831 3831 ES51 (See Footnote)

DODGE TRUCK 1936

370 3701 3701 ES35 ET66
370AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

DODGE TRUCK 1936

370 3701 3701 ES35 ET6
370AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

DODGE TRUCK 1936

311 2101 2824 ES50 (See Footnote)
311AX (Complete King Pin Assembly)

DODGE TRUCK 1936-37

311 2101 2824 ES50 (See Footnote)
311AX (Complete King Pin Assembly)

DODGE TRUCK 1936-37

312 3123 2824 ES6 ET34
312AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

DODGE TRUCK 1937

370 3701 3701 ES57 ET64
370AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

DODGE TRUCK 1937

370 3701 3701 ES57 (See Footnote)
370AX (Complete King Pin Assembly)

DODGE TRUCK 1938

370 3701 3701 ES57 ET64
370AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)
ES70R Also used on Drag Link End.

DODGE TRUCK 1938

370 3701 3701 ES57 (See Footnote)
370AX (Complete King Pin Assembly)
ES70R Also used on Drag Link End.

MODELS G-43, G-44 H-43, H-44, K35, K36, K37, K38, K45, K46, K47, K48—CYLS. 6—AXLE OWN

Front Up.	2	0353	0053	Front	2	0354	0037
Front Lr.	2	0353	0034	Rear Up.	2	0354	0078
Rear	2	0353	0034	Rear Lr.	2	0354	0037

MODELS K50, K51, K52, K70, K71, K72—CYLS. 6—AXLE OWN

Front	2	0351	0094	Front	2	0352	0095
Rear	4	0351	0094	Rear	4	0352	0095

MODELS K22V, K35V, K36V, K37V, K38V, K45V, K46V, K47V, K48V—CYLS. 6—AXLE OWN

Front Up.	2	0353	0053	Front	2	0354	0037
Front Lr.	2	0353	0034	Rear Up.	2	0354	0024
Rear	2	0355	0034	Rear Lr.	2	0354	0037

MODELS KC, KCL—CYLS. 6—AXLE OWN

*SU812 *SU813 Front	2	0346	0092	Front	2	0346	0092

MODELS K50V, K51V, K52V, K60V, K61V, K62V—CYLS. 6—AXLE OWN

Front Up.	2	0358	0096	Front	2	0360	0098
Front Lr.	2	0358	0097	Rear Up.	2	0360	0099
Rear	2	0359	0097	Rear Lr.	2	0360	0098

MODELS LC, LCUSA TO SERIAL 8118443—CYLS. 6

*SU810 (Front of Front, Right Side)
*SU838 (Front of Front, Left Side)
*SU843 (Rear of Rear)

Rear	2	0350	0093	Front	2	0344	0091

MODELS LC, LCUSA AFTER SERIAL 8118443—CYLS. 6

*SU810 (Front of Front, Right Side)
*SU838 (Front of Front, Left Side)
*SU843 (Rear of Rear, Right Side)
*SU842 (Rear of Rear, Left Side)

Rear	2	0350	0093	Front	2	0344	0091

MODELS LE31USA, LE32USA, ½ T; LF37NC SCHOOL BUS—CYLS. 6—AXLE OWN

MODELS LE15-16-17-20-21-22-30-31-32; ME15-16-17-20-21-22-30-31-32; LF28-35-36-37, MF28-35-36-37-38-39, ¾-1-1½ T—CYLS. 6—AXLE OWN

*T706	Rear	2	0356	0018	Front	2	0357	0031
♂Front of Front					Rear Up.	2	0357	0075
					Rear Lr.	2	0357	0031

MODELS LG40-41-42-43; LH29-45-46-47-48; MG 40-41-42-43; MH29-45-46-47-48; 1-1½ T—CYLS. 6

Front Up.	2	0353	0053	Front	2	0354	0037
Front Lr.	2	0353	0034	Rear Up.	2	0354	0024
Rear	2	0355	0034	Rear Lr.	2	0354	0037

MODELS MC, ½ T—CYLS. 6—AXLE OWN

*SU810 (Front of Front, Right Side)
*SU838 (Front of Front, Left Side)
*SU843 (Rear of Rear, Right Side)
*SU842 (Rear of Rear, Left Side)

Rear	2	0350	0093	Front	2	0345	0091

MODELS MD15, MD16, MD20, MD21, ¾-1 T—CYLS. 6

*SU810 (Front of Front, Right Side)
*SU838 (Front of Front, Left Side)

Rear	2	0350	0093

MODELS RC, ½ T—CYLS. 6—AXLE OWN

Rear	2	0350	0093	Front	2	0345	0091

MODELS RD15, RD16, RD20, RD21, ¾, 1 T—CYLS. 6—AXLE OWN

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.
(6-1-38)

Do-Es

Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

DODGE TRUCK — 1938

311 2101 2824
311AX (Complete King Pin Assembly)

DODGE TRUCK — 1938

312 3123 2824 ES6 ET34
312AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

DODGE TRUCK — 1938

383 3831 3831

DOVER TRUCK — 1929

ES7 ET7

DURANT — 1922-25

160 1601 1601 538 5382 None

DURANT — 1925-26

191 1601 1601 Ball Type Used

DURANT — 1926-28

222 1601 1601 Ball Type Used

DURANT — 1928-29

222 1601 1601 Ball Type Used

DURANT — 1928-29

280 1641 1641 Ball Type Used
1641SB 1641SB

DURANT — 1930-32

222 1601 1601 ES7 ET4

DURANT — 1930-32

280 1641 1641 ES7 ET4
1641SB 1641SB

DURANT TRUCK — 1928

233 2331 2331 Ball Type Used

ERSKINE — 1927-29

245 2451 2451 ES5 ET9

ERSKINE — 1930

284 2841 2841 ES5 ET9
284AX (Complete King Pin Assembly)
(Int. Rod Fact. Dup.)

ESSEX — 1922-23

169 1693 1694 529 5022 None

ESSEX — 1923-25

165 1653 1654 544 5442 None
1653SB 1654SB

ESSEX — 1926-27

224 2243 1654 544 5442 None
1654SB

ESSEX — 1927-28

261 2481 2481 ES7 ET7
2481SB 2481SB (Int. Rod Fact. Dup.)

ESSEX — 1929

279 2793 2794 ES7 ET7
(Int. Rod Fact. Dup.)

MODELS RE15, RE16, RE17, ¾ T, RE20, RE21, RS22, 1 T, RE30, RE31, RE32, RF35, RF36, RF37, RFD 38, RF39, 1½ T—CYLS. 6—AXLE OWN

*T706	Rear	2	0356	0018	Front	2	0357	0031		
♂Front of Front					Rear Up.	2	0357	0075		
					Rear Lr.	2	0357	0031		

MODELS RG40, RG41, RG42, RG43, 1½ T, RH45, RH46, RH47, RH48, 2 T—CYLS. 6—AXLE OWN

MODELS ML50, ML51, ML52, ML53, 2T, MK60, MK61, MK62, MK63, 3T, RL50, RL51, RL52, RL53, 2T, RK60, RK61, RK62, RK63, 3 T—CYLS. 6—AXLE OWN

MODELS ¾ TON—CYLS. 6—AXLE OWN

(Int. Rod Fact. Dup.)

MODELS A22—CYLS. 4—AXLE OWN

MODELS A22, (4 BRAKES)—CYLS. 4—AXLE TIMK.

MODELS M2, M4, 40—CYLS. 4—AXLE TIMK.

MODELS 55, 60, 63, 65, 66—CYLS. 6—AXLE TIMK.

*T705	*T709	Front	2	0222	0052	Front	2	0222	0052	
SU808	SU806	(Above Spring Bolts are Thompson Quality)								
		Front	2	0242	0052	Front	2	0242	0052	
		(Above Spring Bolts are Factory Duplicate)								

MODELS 70, 75—CYLS. 6—AXLE TIMK.

*T705 *T709
SU808 SU806

MODELS 6-14, 6-12, 6-19—CYLS. 6—AXLE TIMK.

*T705 *T709
SU808 SU806

MODELS 6-17—CYLS. 6—AXLE TIMK.

*T705 *T709
SU808 SU806

MODELS EXPRESS L, 1 T—CYLS. 4—AXLE TIMK.

MODELS ALL—CYLS. 6—AXLE OWN

Front	2	0249	0014	Front	2	0251	0068	
Rear Up.	2	0249	0014	Rear	4	0249	0014	
Rear Lr.	2	0250	0067					

MODELS 53, DYNAMIC SIX—CYLS. 6—AXLE OWN

*T705	*T708	Rear	2	0331	0068	Front	2	0332	0083
SU808	SU807								

MODELS ALL—CYLS. 4—AXLE OWN

MODELS SUPER SIX—CYLS. 6—AXLE OWN

Front	2	0168	0020	Front	2	0169	0020	
Rear Up.	2	0168	0020	Rear	4	0169	0020	
Rear Lr.	2	0168	0021					

MODELS SUPER SIX—CYLS. 6—AXLE OWN

Front	2	0168	0020	Front	2	0169	0020	
Rear Up.	2	0168	0020	Rear	4	0169	0020	
Rear Lr.	2	0168	0021					

MODELS SUPER SIX (4 BRAKES)—CYLS. 6—AXLE OWN

Front	2	0168	0020	Front	2	0169	0020	
Rear Up.	2	0168	0020	Rear	4	0169	0020	
Rear Lr.	2	0168	0021					

MODELS CHALLENGER—CYLS. 6—AXLE OWN

Front	2	0169	0020	Front	2	0169	0020	
Rear Up.	2	0168	0020	Rear	4	0168	0020	
Rear Lr.	2	0295	0021					

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

ESSEX 1929

279 2793 3052 ES7 ET7 (Int. Rod Fact. Dup.)

Front	2	0169	0020	Front	2	0169	0020
Rear Up.	2	0168	0020	Rear	4	0168	0020
Rear Lr.	2	0295	0021				

MODELS CARS 928658 TO 974563—CYLS. 6—AXLE OWN

ESSEX 1929

305 2793 3052 ES7 ET7 (Int. Rod Fact. Dup.)

Front	2	0169	0020	Front	2	0169	0020
Rear Up.	2	0168	0020	Rear	4	0168	0020
Rear Lr.	2	0295	0021				

MODELS CARS 974563 AND UP—CYLS. 6—AXLE OWN

ESSEX 1930

305 3052 3052 ES7 ET9 (Int. Rod Fact. Dup.)
305AX (Complete King Pin Assembly)

Front	2	0169	0020	Front	2	0169	0020
Rear Up.	2	0295	0082	Rear Up.	2	0168	0063
Rear Lr.	2	0319	0021	Rear Lr.	2	0168	0020

MODELS CARS 1165674 AND UP—CYLS. 6—AXLE OWN

ESSEX 1931

305 3052 3052 ES7 ET9 (Int. Rod Fact. Dup.)
305AX (Complete King Pin Assembly)

Front	2	0169	0020	Front	2	0169	0020
Rear Up.	2	0295	0082	Rear Up.	2	0168	0063
Rear Lr.	2	0295	0021	Rear Lr.	2	0168	0020

MODELS SUPER SIX—CYLS. 6—AXLE OWN

ESSEX 1932

305 3052 3052 RS26 RT38 ♂ Fact. Dup. ES7 ET9
305AX (Complete King Pin Assembly)

Front	2	0333	0020	Front	2	0334	0020
Rear Up.	2	0295	0082	Rear Up.	2	0335	0063
Rear Lr.	2	0295	0021	Rear Lr.	2	0335	0020

MODELS SUPER SIX—CYLS. 6—AXLE OWN

ESSEX 1932

320 3201 3201 RS31 RT44 (Int. Rod Fact. Dup.)

MODELS TERRAPLANE—CYLS. 6—AXLE OWN

*T733 *T734

ESSEX 1933

342 3425 3421 RS25 RT45
342AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

MODELS TERRAPLANE—CYLS. 6-8—AXLE OWN

*SU815 *SU810

ESSEX 1934

342 3425 3421 ES37 RT45
342AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

MODELS TERRAPLANE—CYLS. 6—AXLE OWN

*SU815 *SU811

FAGEOL TRUCK 1932

328 3281 3281

MODELS 135, 2 T—CYLS. 6—AXLE TIMK. 12703H

FAGEOL TRUCK 1931-35

403 4031 4031

MODELS 250, 250HP, 300, 446, 2½-5 T—CYLS. 6—AXLE TIMKEN

FAGEOL TRUCK 1933-35

402 4021 4021

MODELS 370, 370D, 626, 646, 826, 846—CYLS. 6—AXLE TIMKEN

FALCON KNIGHT 1927-28

237 Brg. Used Ball Type Used

Front	2	0238	007	Front	2	08	007
Rear	4	08	007	Rear	4	08	007

MODELS M10, M12—CYLS. 6—AXLE OWN

FARGO TRUCK (CHRYSLER) 1929-30

278 2071 2781 ES8 ET4
278AX (Complete King Pin Assembly)

MODELS PACKET 4, ½ T—CYLS. 4—AXLE OWN

FARGO TRUCK (CHRYSLER) 1929

278 2071 2781 ES9 ET12
278AX (Complete King Pin Assembly)

MODELS CLIPPER, ¾ T—CYLS. 6—AXLE OWN

FARGO TRUCK (CHRYSLER) 1929-30

276 2761 2761 Ball Type Used

MODELS FREIGHTER, 1 T—CYLS. 6—AXLE OWN

FEDERAL TRUCK 1922-25

110 1103 1104 503 5013 5014

MODELS R2, R3, ¾, 1, 1¼ T—CYLS. 4—AXLE TIMK. 1216

FEDERAL TRUCK 1929

ES1 ET13

MODELS F6, 1 T—CYLS. 6—AXLE CLARK

FEDERAL TRUCK 1919-24

202 None 2022 551 5513 5514

MODELS L, W, WC, WD, WE, X, Z, 3½ T—CYLS. 4—AXLE TIMK.

FEDERAL TRUCK 1928-29

ES6 ET14

MODELS A6—CYLS. 6—AXLE CLARK

FEDERAL TRUCK 1922-24

241 2013 2014 552 5523 5524

MODELS S21, 22, 23, UE, TE, 1, 1½, 2 T—CYLS. 4—AXLE TIMK.

FEDERAL TRUCK 1932-35

322 3221 3221

MODELS 15, 15X, 18, 20, 21, 22, F8, G5, 1½ -3 T—CYLS. 6—AXLE TIMKEN

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.
(6-1-38)

Fe-Fo

Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

FEDERAL TRUCK 1934-35
275 2751 2751

MODELS 25, 2½ T—CYLS. 6—AXLE CLARK F308

FEDERAL TRUCK 1934-35
402 4021 4021

MODELS 50, 4½-5 T—CYLS. 6—AXLE TIMKEN

FEDERAL TRUCK 1935

MODELS 15, 15B, 18, 20, B20

Front	4	HB695	Front	4	HB701
Rear	8	HB695			

FEDERAL TRUCK 1935-36

MODELS 25, B25, 25D, B25D, 28, 28D, 29, 29D

Front	4	HB695	Front	4	HB702
Rear	8	HB695			

FLINT 1924-25
193 1921 1921 Ball Type Used

MODELS E, 55 (4 BRAKES)—CYLS. 6—AXLE OWN

FLINT 1926-27
228 2281 2281 Ball Type Used

MODELS E, 55, 80—CYLS. 6—AXLE ADAMS

FLINT 1926-27
191 1601 1601 Ball Type Used

MODELS 6-40, 60, LT. 6—CYLS. 6—AXLE TIMK.

FLINT 1926-27
160 1601 1601 Ball Type Used

MODELS JR. 6, 18Z—CYLS. 6—AXLE OWN

FORD 1912-27
283 1175 1175 566 5112 None

MODEL T—CYLS. 4—AXLE OWN

FORD 1928-31
286R 2863 2864 Ball Type Used
286L 2863SB 2864SB
286AX (Complete King Bolt Assembly)
286LP
286LN

MODEL A—CYLS. 4—AXLE OWN
T718 T719

FORD 1932
318R 2863 2864 Ball Type Used
318L 2863SB 2864SB
318AX (Complete King Bolt Assembly)
286LP
286LN

MODEL B, 18, V8—CYLS. 4-8—AXLE OWN

FORD 1933-34
318R 2863 2864 Ball Type Used
318L 2863SB 2864SB
318AX (Complete King Pin Assembly)
286LP
286LN

MODEL 40—CYLS. 8—AXLE OWN

T739	T740	Upper	2	0383	Upper	2	0385
		Lower	2	0384	Lower	2	0386
		Side Link	4	0389	Side Link	4	0389

FORD 1935
372R 2863 2864 ES64 ET67
372L 2863SB 2864SB (Int. Rod Fact. Dup.)
372AX (Complete King Pin Assembly) DS67
286LP (Lock Pin) ♂ Drag Link
286LN (Lock Pin Nut) Assembly
ES64L Adjustable Drag Link End

MODELS 48—CYLS. 8—AXLE OWN

HS100	HS101	Upper	2	0387	Upper	2	0385
T741	T742	Lower	2	0387	Lower	2	0385
		Side Link	4	0389	Side Link	4	0389

FORD 1936
372R 2863 2864 ES64 ET67
372L 2863SB 2864SB (Int. Rod Fact. Dup.)
372AX (Complete King Pin Assembly) DS67
286LP (Lock Pin) ♂ Drag Link
286LN (Lock Pin Nut) Assembly
ES64L (Adjustable Drag Link End)

MODELS 68—CYLS. 8—AXLE OWN

HS100	HS101						
T741	T743	Upper	2	0387	Upper	2	0385
		Lower	2	0387	Lower	2	0386
		Side Link	4	0389	Side Link	4	0389

FORD 1937
389 3893 3894 ES64 ET68
3893SB 3894SB (Int. Rod Fact. Dup.)
389AX (Complete King Pin Assembly)
286LP (Lock Pin) ♂ Drag Link
286LN (Lock Pin Nut) Assembly
ES64L Adjustable Drag Link End

MODELS 74, 78—CYLS. 8—AXLE OWN

HS100	HS101						
T741	T742	Upper	2	0387	Upper	2	0385
		Lower	2	0387	Lower	2	0385
		Side Link	4	0389	Side Link	4	0389

FORD 1938
389 3894 3894 ES64 ET68
3894SB 3894SB (Int. Rod Fact. Dup.)
389AB (Complete King Pin Assembly) DS68
ES64L Adjustable Drag Link End ♂ Drag Link
Assembly

MODELS 81-A, 82-A—CYLS. 8—AXLE OWN

T741	T742	Upper	2	0387	Upper	2	0385
		Lower	2	0387	Lower	2	0385
		Side Link	4	0389	Side Link	4	0389

FORD TRUCK 1916-27
283 1175 1175 566 5112 None

MODEL T—CYLS. 4—AXLE OWN

FORD TRUCK 1928-29
286R 2863 2864 Ball Type Used
286L 2863SB 2864SB
286AX (Complete King Bolt Assembly)
286LP
286LN

MODEL A, AA—CYLS. 4—AXLE OWN
T718 T719

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

FORD TRUCK — 1930-31

286R 2863 2864 Ball Type Used
286L 2863SB 2864SB
286AX (Complete King Bolt Assembly)
286LP
286LN
Ford King Bolt 286R=right hand bolt; 286L=left hand bolt; 286LP=lock pin for 286R & L; 286LN=lock nut for 286LP

FORD TRUCK — 1930-34

309R 3091 3091 Ball Type Used
309L 3091SB 3091SB
309AX (Complete King Bolt Assembly)
286LP
309LN
Ford King Bolt 309R=right hand bolt; 309L=left hand bolt; 286LP=lock pin for 309R & L; 286LN=lock nut for 286LP

FORD TRUCK — 1932-33

318R 2863 2864 Ball Type Used
318L 2863SB 2864SB
318AX (Complete King Bolt Assembly)
286LP
286LN
Ford King Bolt 318R=right hand bolt; 318L=left hand bolt; 286LP=lock pin for 318R & L; 286LN=lock nut for 286LP

FORD TRUCK — 1935

372R 2863 2864 ES64 ET67
372L 2863SB 2864SB (Int. Rod Fact. Dup.)
372AX (Complete King Pin Assembly) DS67
286LP (Lock Pin) ♂ Drag Link
286LN (Lock Pin Nut) Assembly
ES64L Adjustable Drag Link End

FORD TRUCK — 1935-36

373R 3091 3091 ES65 ET69
373L 3091SB 3091SB (Int. Rod Fact. Dup.)
373AX (Complete King Pin Assembly)
286LP (Lock Pin)

FORD TRUCK — 1936

372R 2863 2864 ES64 ET67
372L 2863SB 2864SB (Int. Rod Fact. Dup.)
372AX (Complete King Pin Assembly) DS67
286LP (Lock Pin) ♂ Drag Link
286LN (Lock Pin Nut) Assembly
ES64L (Adjustable Drag Link End)

FORD TRUCK — 1937

389 3893 3894 ES64 ET68
3893SB 3894SB (Int. Rod Fact. Dup.)
389AX (Complete King Pin Assembly) DS68
286LP (Lock Pin) ♂ Drag Link
286LN (Lock Pin Nut) Assembly
ES64L Adjustable Drag Link End

FORD TRUCK — 1937

373R 3091 3091 ES65 ET69
373L 3091SB 3091SB (Int. Rod Fact. Dup.)
373AX (Complete King Pin Assembly)
286LP (Lock Pin)

FORD TRUCK — 1938

389 3894 3894 ES64 ET68
3894SB 3894SB (Int. Rod Fact. Dup.)
389AB (Complete King Pin Assembly) DS68
ES64L Adjustable Drag Link End ♂ Drag Link

FORD TRUCK — 1938

389 3894 3894 ES64 ET68
3894SB 3894SB (Int. Rod Fact. Dup.)
389AB (Complete King Pin Assembly) DS68
ES64L Adjustable Drag Link End ♂ Drag Link Assembly

FORD TRUCK — 1938

401 4011 4011 ES65 ET69
4011SB 4011SB (Int. Rod Fact. Dup.)
401AX (Complete King Pin Assembly)

FRANKLIN — 1916-25

170 1701 1701 Ball Type Used

FRANKLIN — 1925-27

187 1871 1871 Ball Type Used

FRANKLIN — 1927-28

259 2591 2591 Ball Type Used

MODELS A, ½ T, LIGHT DELY.—CYLS. 4—AXLE OWN

T718 T719

MODELS AA, BB, V8, 1½T.—CYLS. 4-8—AXLE OWN

MODELS B, ½ T, LIGHT DELY.—CYLS. 4—AXLE OWN

MODELS 50, ½T—CYLS. 8—AXLE OWN

HS100 HS101

T741	T742	Upper	2	0387	Upper	2	0385	
		Lower	2	0387	Lower	2	0385	
		Side Link	4	0389	Side Link	4	0389	

MODELS 51, 1½ T—CYLS. 8—AXLE OWN

Sockets used on axle with adjustable spindle connecting rod.

T745		Upper	2	0388		8	0392	
		Lower	2	0388	Front Up.	2		00116
		Side Link	4	0390	Front Lr.	4		00117
					Rear Up.	2		00116
					Rear Lr.	4		00117

MODELS 67, ½ T—CYLS. 8—AXLE OWN

HS100 HS101

T741	T743	Upper	2	0387	Upper	2	0385	
		Lower	2	0387	Lower	2	0386	
		Side Link	4	0389	Side Link	4	0389	

MODELS 73, 77, ½ T—CYLS. 8—AXLE OWN

HS100 HS101

T741	T742	Upper	2	0387	Upper	2	0385	
		Lower	2	0387	Lower	2	0385	
		Side Link	4	0389	Side Link	4	0389	

MODELS 75, 79, 1½ T—CYLS. 8—AXLE OWN

T744		Upper	2	0388		8	0392	
		Lower	2	0388	Front Up.	2		00116
		Side Link	4	0391	Front Lr.	4		00117
					Rear Up.	2		00116
					Rear Lr.	4		00117

MODELS 81-C, 82-C, ½ T—CYLS. 8—AXLE OWN

T741	T742	Upper	2	0387	Upper	2	0385	
		Lower	2	0387	Lower	2	0385	
		Side Link	4	0389	Side Link	4	0389	

MODELS 81Y, 82Y, 1 T—CYLS. 8—AXLE OWN

T741		Upper	2	0387		8	0393	
		Lower	2	0387	Upper	4		00118
		Side Link	4	0389	Lower	4		00119

MODELS 81-T, 817-T, 81U, 1½ T—CYLS. 8—AXLE OWN

T744		Upper	2	0388	Upper	4	0392	00120
		Lower	2	0388	Lower	4	0394	00117
		Side Link	4	0391				

MODELS 9B, 10A, 10B, 10C—CYLS. 6—AXLE OWN

MODELS 11, 11A, 11B—CYLS. 6—AXLE OWN

MODELS AIRMAN 12A, 12B, 130—CYLS. 6—AXLE OWN

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.
(6-1-38)

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

FRANKLIN 1929-31

259 2591 2591 Ball Type Used

GARDNER 1925-28

185 1851 1851 Ball Type Used

GARFORD TRUCK 1915-24

202 None 2022 551 5513 5514

GARFORD TRUCK 193134

402 4021 4021

G. M. C. TRUCK 1924-29

299 2991 2991 ES22 ET27

G. M. C. TRUCK 1927-28

299 2991 2991 ES22 ET27

G. M. C. TRUCK 1922-23

200 None 2002 552 5523 5524

G. M. C. TRUCK 1928-30

266 2661 2661 ES23 ET11
2661SB 2661SB
266LP
♂ Lock Pin for 266
266AX (Complete King Pin Assembly)

G. M. C. TRUCK 1928-30

297 1531 2653 ES21 ET13

G. M. C. TRUCK 1929-30

297 1531 2653 ES21 ET13

G. M. C. TRUCK 1927-29

298 1531 1531 ES6 ET34

G. M. C. TRUCK 1929-31

ES16 ET28

G. M. C. TRUCK 1928-29

ES17 ET20

G. M. C. TRUCK 1927-29

ES17 ET21

G. M. C. TRUCK 1929-32

ES18 ET22

G. M. C. TRUCK 1929-31

ES22 ET28

G. M. C. TRUCK 1929-32

323 3233 3234 ES22 ET27

G. M. C. TRUCK 1930

330 3301 3301 ES22
(See Footnote)

G. M. C. TRUCK 1932

ES21 ET13

G. M. C. TRUCK 1931-33

ES22 ET27

G. M. C. TRUCK 1931-33

322 3221 3221

G. M. C. TRUCK 1931-33

ES18
(See Footnote)

G. M. C. TRUCK 1932-35

313 3131 3131 ES23 ET11
313LP 3131SB 3131SB RS29
♂ Lock Pin for 313 (See Footnote)
313AX (Complete King Pin Assembly)

MODELS 135, 137, 145, 147, 151, 152, 153—CYLS. 6—AXLE OWN

MODELS 6A, 6B, 8A, 8B, 75, 80, 90—CYLS. 6-8—AXLE OWN

MODELS 77, B, C, D, 80, 3½ T—CYLS. 4—AXLE TIMK.

MODELS 40, 40Z, 60Z, 2-3 T—CYLS. 6—AXLE TIMKEN

MODELS K17, K32, 1, 1½ T, T42, 2, 3 T—CYLS. 4-6—AXLE OWN
(Int. Rod Fact. Dup.)

MODELS T40, T50, 2 T—CYLS. 6—AXLE OWN
(Int. Rod Fact. Dup.)

MODELS K41, 2½ T—CYLS. 4—AXLE TIMK. 1542

MODELS T11, ½ T—CYLS. 6—AXLE OWN

MODELS T15, T17, T19, T25, ½, 1, 1¼, 1½, 1¾, T—CYLS. 6—AXLE TIMK.
(Int. Rod Fact. Dup.)

MODELS T19, 34, ½, 1, 1¼, 1½ T—CYLS. 6—AXLE TIMK.
(Int. Rod Fact. Dup.)

MODELS T20, T21, EXP, 1, 1½ T—CYLS. 6—AXLE OWN

MODELS K54, K56—CYLS. 4-6—AXLE TIMKEN
(Int. Rod Fact. Dup.)

MODELS K72—CYLS. 4—AXLE TIMK.
(Int. Rod Fact. Dup.)

MODELS K102—CYLS. 4—AXLE TIMK.

MODELS W, WX, U, COACH—CYLS.—AXLE TIMK.
(Int. Rod Fact. Dup.)

MODELS K54, K56—CYLS. 4-6—AXLE EATON
(Int. Rod Fact. Dup.)

MODELS T60, T80, T82, T90, 2, 4, 5 T—CYLS. 6—AXLE OWN
(Int. Rod Fact. Dup.)

MODELS T44, 2, 4 T—CYLS. 6—AXLE OWN

MODELS T19A, 1½, 2 T—CYLS. 6—AXLE OWN

MODELS T31A, T45A, T51, T55, T61, T61A, 2½-6 T—CYLS. 6—AXLE OWN
(Int. Rod Fact. Dup.)

MODELS T19, T26, T33, 1½-2-3T—CYLS. 6—AXLE TIMKEN

MODELS T83, T85, T95, T96—CYLS. 6

MODELS T18, T23, T16, 1½-2-3 T—CYLS. 6 AXLE OWN

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

G. M. C. TRUCK 1935-36

322 3221 3221

ES21
(See Footnote)

G. M. C. TRUCK 1935

330 3301 3301

ES22
(See Footnote)

G. M. C. TRUCK 1935

323 3233 3234

G. M. C. TRUCK 1934-38

413 4131 4131

G. M. C. TRUCK 1935-37

313 3131 3131
3131SB 3131SB
365 (.005" O.S. for 313)
393 (.010" O.S. For 313)
313AX (Complete King Pin Assembly)
365AX (Complete King Pin Assembly)
393AX (Complete King Pin Assembly)

RS26 RT38
(Int. Rod Fact. Dup.)

G. M. C. TRUCK 1936-37

266 2661 2661
2661SB 2661SB
266AX (Complete King Pin Assembly)
387 (.005" O.S. for 266)
387AX (Complete King Pin Assembly)

RS29
(See Footnote)

G. M. C. TRUCK 1937

322 3221 3221

ES23 ET11
RS29
(See Footnote)

G. M. C. TRUCK 1937

323 3233 3234

G. M. C. TRUCK 1937-38

322 3221 3221

ES73
(See Footnote)

G. M. C. TRUCK 1936

ES21
(See Footnote)

G. M. C. TRUCK 1935-36

G. M. C. TRUCK 1935-37

G. M. C. TRUCK 1935-37

G. M. C. TRUCK 1936-37

G. M. C. TRUCK 1937

G. M. C. TRUCK 1933

G. M. C.

G. M. C.

MODELS T23, 3T.—CYLS. 6—AXLE TIMKEN

MODELS T33, T43, 3½-4 T—CYLS. 6—AXLE EATON

MODELS T46, T46H, 5 T—CYLS. 6—AXLE EATON

Radius Rod 4 HB739

MODELS T75, T75H, T75T, T78, T78T, T84, T61H, F61—CYLS. 6—AXLE TIMKEN

MODELS T16, T16H, T18, 1½-3½ T—CYLS. 6—AXLE OWN

*T736	Rear	2	0343	0089	Front	2	0338	0042
					Rear	4	0338	0042

MODELS T14, ½ T—CYLS. 6—AXLE OWN

*T736 *T735	Rear	2	0343	0089	Front	2	0343	0089

MODELS F18, F18H, 1½-4½ T—CYLS. 6—AXLE OWN

MODELS F33, F33H, 2½-7 T—CYLS. 6—AXLE OWN

MODELS F16, F16H, T16H, T18, T18H—CYLS. 6—AXLE TIMKEN

MODELS T23—CYLS. 6—AXLE OWN

MODELS T18, T18H, T23 AFTER T23-5969—CYLS. 6—AXLE OWN

Front Up.	2	0361	0034	Front	2	0338	0042
Front Lr.	2	0361	00100	Rear	4	0338	0042
Rear	2	0366	0034				

MODELS T33 AFTER T33-2507, T33H, F23, F23H, 2, 2½T

Front Up.	2	0362	0037	Front	2	0364	0094
Front Lr.	2	0362	00100	Rear Up.	2	0364	0094
Rear	2	0363	0037	Rear Lr.	2	0364	00101

MODELS T46, T46H, T51, T51H, T51W, F33, F33H, 2½, 3½ T—CYLS. 6—AXLE OWN

Front Up.	2	0365	0094	Front	2	0364	0094
Front Lr.	2	0365	00102	Rear	2	0364	0094
Rear	2	0364	0094				00101

MODELS T23H, 1936-37; T23, 1937—CYLS. 6

Front Up.	2	0361	0034	Front	2	0364	0094
Front Lr.	2	0361	00100	Rear	2	0364	0094
Rear	2	0366	0034				00101

MODELS T33, T33H, 2½ T—CYLS. 6—AXLE OWN

Front Up.	2	0362	0037	Front	2	0364	0094
Front Lr.	2	0362	00100	Rear	2	0364	0094
Rear	2	0363	0037				00101

MODELS TAXI, 014

Front	4	HB691	Front	4 HB683
Rear	8	HB691	Rear	8 HB683

MODELS 395, 767

Front	6	HB691	Front	6 HB683
Rear	6	HB691	Rear	6 HB683

MODELS COACHES, 709, 712, 714, 715, 789

Front	4	HB701	Front	4 HB701
Rear	8	HB701	Rear	8 HB701

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.
GOTFREDSON TRUCK 1921-25										**MODELS 50, 2½ T—CYLS. 4—AXLE TIMK. 1520**							
201	2013	2014	552	5523	5524												
GOTFREDSON TRUCK 1921-25										**MODELS 80, 3½ T—CYLS. 4—AXLE TIMK.**							
202	None	2022	551	5513	5514												
GOTFREDSON TRUCK 1928-29										**MODELS B36, RW44, 1½, 2½ T—CYLS. 6—AXLE TIMK. 12703H**							
328	3281	3281															
GRAHAM 1930-31										**MODELS STANDARD SIX—CYLS. 6—AXLE SALIS.**							
285	2851	2851				ES6	ET14			Front	4	HB534B					
GRAHAM 1930-31										**MODELS SPECIAL SIX—CYLS. 6—AXLE SALIS.**							
196	1961	1961				ES7	ET10										
GRAHAM 1930-31										**MODELS STANDARD, SPECIAL EIGHT—CYLS. 8—AXLE SALIS.**							
233	2331	2331				ES7	ET10			Front	4	HB534B		Front	4	HB534C	
														Rear	8	HB534C	
GRAHAM 1931										**MODELS 8-20—CYLS. 8—AXLE SALIS.**							
310	3101	3101	Ball Type Used							Front	4	HB680		Front	4	HB680	
										Rear	8	HB680		Rear	8	HB680	
GRAHAM 1931-32										**MODELS PROSPERITY SIX, 56—CYLS. 6—AXLE OWN**							
285	2851	2851				ES6	ET14			Front	4	HB680		Front	4	HB680	
										Rear	8	HB680		Rear	8	HB680	
GRAHAM 1930-32										**MODELS 46, 53, 54—CYLS. 6—AXLE OWN**							
285	2851	2851								Front	4	HB680		Front	4	HB680	
										Rear	8	HB680		Rear	8	HB680	
GRAHAM 1932										**MODELS BLUE STREAK, 57—CYLS. 8—AXLE OWN**							
310	3101	3101				ES20	ET32			Front	4	HB680					
						RS26				Rear (RH)	4	HB686					
						(See Footnote)				Rear (LH)	4	HB687					
GRAHAM 1933										**MODELS 8, 64—CYLS. 8—AXLE OWN**							
310	3101	3101				ES20	ET32			Front	4	HB680					
						RS26				Rear (RH)	4	HB686					
						(See Footnote)				Rear (LH)	4	HB687					
GRAHAM 1933										**MODELS STD. 6, 65—CYLS. 6—AXLE OWN**							
310	3101	3101				ES20	ET32			Rear (RH)	4	HB686					
			(See Footnote)			RS26				Rear (LH)	4	HB693		Rear	8	HB680	
GRAHAM 1933										**MODELS 58—CYLS. 6—AXLE OWN**							
310	3101	3101				ES20	ET32			Front	4	HB680		Front	4	HB680	
			(See Footnote)			RS26				Rear	8	HB680		Rear	8	HB680	
GRAHAM 1934										**MODELS 68—CYLS. 6—AXLE OWN**							
352	1961	1961				RS25				Front	8	HB691		Front	4	HB709	
						(See Footnote)				Rear (RH)	4	HB709		Rear	8	HB691	
										Rear (LH)	4	HB710					
GRAHAM 1934-35										**MODELS 67, 69, 72, 75, 79—CYLS. 8—AXLE OWN**							
310	3101	3101				RS26				Rear (RH)	4	HB693		Front	4	HB686	
						(See Footnote)								Rear	8	HB680	
GRAHAM 1935										**MODELS 73, SPECIAL SIX—CYLS. 6—AXLE OWN**							
352	1961	1961				RS25				Front	4	HB691		Front	4	HB709	
						(See Footnote)				Rear (RH)	4	HB709		Rear	8	HB691	
										Rear (LH)	4	HB710					
GRAHAM 1935										**MODELS 74, STANDARD SIX—CYLS. 6—AXLE OWN**							
352	1961	1961				ES40				Front	4	HB691		Front	4	HB709	
						(See Footnote)				Rear	8	HB691		Rear	8	HB691	
GRAHAM 1936										**MODELS 90 CAVALIER, 110 SUPERCHARGED—CYLS. 6—AXLE OWN**							
352	1961	1961				ES47											
						(See Footnote)											
GRAHAM 1936-37										**MODELS 80, 85, CRUSADER—CYLS. 6—AXLE OWN**							
352	1961	1961															
GRAHAM 1937										**MODELS 95, CAVALIER—CYLS. 6—AXLE OWN**							
352	1961	1961				ES62											
GRAHAM 1937										**MODELS 116, 120, SUPERCHARGER—CYLS. 6—AXLE OWN**							
352	1961	1961				ES58											
GRAHAM 1933-35										**MODELS 65, 68, 73—CYLS. 6**							
										Motor Mounting					8	HB680	

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.
(6-1-38)

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

GRAHAM ——— 1933-36

GRAHAM ——— 1935

GRAHAM ——— 1935

GRAHAM ——— 1935-36

GRAHAM BROS. TRUCK

247 2471 2471 564 5642 None

GRAHAM BROS. TRUCK

247 2471 2471 564 5642 None

GRAHAM BROS. TRUCK

247 2471 2471 564 5642 None

GRAHAM BROS. TRUCK

247 2741 2741 Ball Type Used

GRAHAM BROS. TRUCK ——— 1927-28

275 2751 2751 Ball Type Used

GRAHAM BROS. TRUCK

247 2741 2741 Ball Type Used

GRAHAM BROS. TRUCK

275 2751 2751 Ball Type Used

GRAHAM BROS. TRUCK

276 2761 2761 ES6 ET29

GRAHAM BROS. TRUCK

194 1941 1941 539 5392 None

GRAHAM BROS. TRUCK

247 2471 2471 564 5642 None

GRAHAM BROS. TRUCK ——— 1927-29

276 2761 2761 Ball Type Used

GRAHAM BROS. TRUCK ——— 1927-28

ES6 ET15

GRAHAM BROS. TRUCK ——— 1928-30

ES6 ET14

GRAHAM PAIGE ——— 1928

196 1961 1961 ES7 ET6

GRAHAM PAIGE ——— 1929

196 1961 1961 ES7 ET6

GRAHAM PAIGE ——— 1929

285 2851 2851 ES7 ET6

GRAHAM PAIGE ——— 1930

196 1961 1961 ES7 ET6

GRAHAM PAIGE ——— 1928-29

276 2761 2761 ES6 ET5

GRAHAM PAIGE ——— 1929

289 2891 2891 ES6 ET5

MODELS 65, 67, 68, 69, 73, 76, 77—CYLS. 6-8

Kick Shackle 2 HB692

MODELS 72, 75—CYLS. 8

Kick Shackle 2 HB687

MODELS 72, 74, 75—CYLS. 6-8

Shock Absorber—Grommet 12-16 HB724

MODELS 72, 73, 74, 75, 76, 77, 81, 83

Shock Absorber—Grommet 16 HB724

MODELS FRAME NO. 73548 AND UP—CYLS. 4—AXLE OWN

MODELS SERIES D, ¾ T—CYLS. 4—AXLE OWN

Front	2	0173	0022	Front	2	0175	0026
Rear Up.	2	0173	0010	Rear	4	0173	0010
Rear Lr.	2	0174	0022				

(Above Spring Bolts are Thompson Quality)

Front	2	0246	0022	Front	2	0248	0026
Rear Up.	2	0246	0010	Rear	4	0246	0010
Rear Lr.	2	0247	0022				

(Above Spring Bolts are Factory Duplicate)

MODELS SERIES D, 1 T—CYLS. 4—AXLE OWN

Front	2	0289	0034	Front	2	0293	0037
Rear Up.	2	0290	0029	Rear Up.	2	0293	0037
Rear Lr.	2	0290	0034	Rear Lr.	2	0294	0029

MODELS SERIES D, 1½, 2 T—CYLS. 4—AXLE OWN

Front	2	0289	0034	Front	2	0291	0037
Rear Up.	2	0290	0029	Rear	4	0292	0037
Rear Lr.	2	0290	0034				

MODELS GE, RE, HE, 3 T—CYLS. 6—AXLE OWN

MODELS TER—CYLS. 6—AXLE OWN

MODELS ME, LE—CYLS. 6—AXLE OWN

MODELS DE—CYLS. 6—AXLE OWN

MODELS G-BOY, 1 T—CYLS. 4—AXLE DODGE

MODELS G-BOY, 1 T—CYLS. 4—AXLE GRAHAM

MODELS BE, 1¼ T—CYLS. 6—AXLE OWN

Front	2	0289	0034	Front	2	0293	0037
Rear Up.	2	0290	0029	Rear Up.	2	0293	0037
Rear Lr.	2	0290	0034	Rear Lr.	2	0294	0029

MODELS 4-44, 1½ T—CYLS. 4—AXLE OWN

MODELS 2 TON—CYLS. 6—AXLE OWN

MODELS 610—CYLS. 6—AXLE SALIS.

Front	2	0123	0063	Front	2	0282	0053
Rear	4	0122	0063	Rear	4	0122	0063

MODELS 614—CYLS. 6—AXLE SALIS.

Front	2	0278	0063	Front	2	0277	0053
Rear	4	0276	0063	Rear	4	0278	0063

MODELS 612—CYLS. 6—AXLE SALIS.

*T710 *T712 SU802 SU801	Front	2	0123	0063	Front	2	0277	0053

MODELS 615—CYLS. 6—AXLE SALIS.

*T710 *T712 SU802 SU801	Front	2	0123	0063	Front	2	0277	0053

MODELS 619, 629, 835—CYLS. 6-8—AXLE OWN

Front	2	0281	0053	Front	2	0280	0041
Rear	4	0279	0053	Rear	4	0281	0035

MODELS 621—CYLS. 6—AXLE OWN

Front	2	0296	0053	Front	2	0280	0041
Rear	4	0297	0053	Rear	4	0296	0035

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

GRAHAM PAIGE 1929-30
289 2891 2891 ES6 ET2

GRAMM BERNSTEIN TRUCK 1930-31
328 3281 3281

HAHN TRUCK 1930-32
328 3281 3281

HAHN TRUCK 1934-35
322 3221 3221

HAHN TRUCK 1934-35
402 4021 4021

HAHN TRUCK 1934-35
403 4031 4031

HUDSON 1921-24
110 1103 1104 503 5013 5014

HUDSON 1925-26
180 1803 1104 503 5013 5014

HUDSON 1927-28
253 2533 2534 ES6 ET8

HUDSON 1929
281 2813 2814 ES6 ET8

HUDSON 1929
304 2813 2814 ES6 ET8

HUDSON 1930
305 3052 3052 ES7 ET9 (Int. Rod Fact. Dup.)
305AX (Complete King Pin Assembly)

HUDSON 1931
305 3052 3052 ES7 ET9 (Int. Rod Fact. Dup.)
305AX (Complete King Pin Assembly)

HUDSON 1932
305 3052 3052 RS26 RT38
305AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.) ES7 ET9

HUDSON 1933
305 3052 3052 RS26 RT38
305AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

HUDSON 1934
342 3425 3421 ES37 RT45
342AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

HUDSON 1935
342 3425 3421 ES55 RT45
342AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

HUDSON 1936
342 3425 3421 ES46 ET58
342AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

HUDSON 1936
342 3425 3421 ES55 RT45
342AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

MODELS 827, 837—CYLS. 8—AXLE OWN

Front	2	0296	0053	Front	2	0280	0041
Rear	4	0297	0053	Rear	4	0296	0035

MODELS J, B6, 2 T—CYLS. 6—AXLE TIMK. 12703H

MODELS 37H, 37HL, 2 T—CYLS. 6—AXLE TIMK. 12703H

MODELS HB4, HB5, HB6, 2, 2½, 3 T—CYLS. 6—AXLE TIMKEN

MODELS 440, HE2, 4-7 T—CYLS. 6—AXLE TIMKEN

MODELS 300, HD2, 3½-6 T—CYLS. 6—AXLE TIMKEN

MODELS SUPER SIX—CYLS. 6—AXLE OWN

Front	2	0116	0027	Front	2	0112	0035
Rear Up.	2	0117	0028	Rear	4	0118	0027
Rear Lr.	2	0118	0027				

MODELS SUPER SIX—CYLS. 6—AXLE OWN

Front	2	0116	0027	Front	2	0112	0035
Rear Up.	2	0117	0028	Rear	4	0118	0027
Rear Lr.	2	0118	0027				

MODELS SUPER SIX—CYLS. 6—AXLE OWN

Front	2	0116	0027	Front	2	0112	0035
Rear Up.	2	0117	0028	Rear	4	0118	0027
Rear Lr.	2	0118	0027				

MODEL CARS WITHOUT LOWER ALEMITE FITTING NO. 825407 AND UP—CYLS. 6—AXLE OWN

Front	2	0116	0027	Front	2	0112	0035
Rear Up.	2	0117	0028	Rear	4	0118	0027
Rear Lr.	2	0118	0027				

MODELS CARS WITH LOWER ALEMITE FITTING NO. 825407 AND UP—CYLS. 6—AXLE OWN

Front	2	0116	0027	Front	2	0112	0035
Rear Up.	2	0117	0028	Rear	4	0118	0027
Rear Lr.	2	0118	0027				

MODELS GREAT EIGHT—CYLS. 8—AXLE OWN

Front	2	0169	0020	Front	2	0169	0020
Rear Up.	2	0295	0082	Rear Up.	2	0168	0063
Rear Lr.	2	0319	0021	Rear Lr.	2	0168	0020

MODELS GREATER EIGHT—CYLS. 8—AXLE OWN

Front	2	0169	0020	Front	2	0169	0020
Rear Up.	2	0295	0082	Rear Up.	2	0168	0063
Rear Lr.	2	0295	0021	Rear Lr.	2	0168	0020

MODELS GREATER EIGHT—CYLS. 8—AXLE OWN

Front	2	0333	0020	Front	2	0334	0020
Rear Up.	2	0295	0082	Rear Up.	2	0335	0063
Rear Lr.	2	0295	0021	Rear Lr.	2	0335	0020

MODELS SUPER SIX, EIGHT—CYLS. 6-8—AXLE OWN

MODELS LL, LT—CYLS. 8—AXLE OWN
*SU815 *SU811

MODELS BIG SIX, SPEC., DE LUXE, CUSTOM 8—CYLS. 6-8—AXLE OWN
*SU815 *SU811

MODELS DE LUXE, 63—CYLS. 6—AXLE OWN
*SU815 *SU811
*SU840 (Front of Rear)

MODELS DE LUXE, 64, 66, CUSTOM 65, 67—CYLS. 8—AXLE OWN
*SU815 *SU811
*SU840 (Front of Rear)

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.
(6-1-38)

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

HUDSON **1937**

390 3905 3901 ES46 ET58
390AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

HUDSON **1937**

390 3905 3901 ES55 RT45
390AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

HUDSON **1938**

395 3905 3901 ES72 RT45
395AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

HUDSON **1938**

395 3905 3901 ES72 RT45
395AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

HUDSON **1935**

HUDSON **1936**

HUPMOBILE **1920-23**

156 1561 1561 534 5342 None

HUPMOBILE **1923-25**

156 1561 1561 534 5342 None

HUPMOBILE **1925-27**

210 2101 2101 ES1 ET1

HUPMOBILE **1928-29**

272 2101 2101 ES1 ET1

HUPMOBILE **1930-31**

288 1961 1961 ES1 ET13

HUPMOBILE **1931-32**

288 1961 1961 ES1 ET13

HUPMOBILE **1925**

198 1981 1981

HUPMOBILE **1926-27**

223 2491 2491 Ball Type Used

HUPMOBILE **1928**

272 2101 2101 ES1 ET1

HUPMOBILE **1928**

272 2101 2101 ES1 ET1

HUPMOBILE **1929**

296 2491 2964 ES1 ET1

HUPMOBILE **1930-32**

295 2491 2954 ES1 ET1

MODELS 73—CYLS. 6—AXLE OWN

*SU847 (Front of Front, Right Side)
*SU848 (Front of Front, Left Side)
*SU848 (Rear of Front, Right Side)
*SU847 (Rear of Front, Left Side)
*SU845 (Rear of Rear, Right Side)
*SU835 (Rear of Rear, Left Side)

MODELS 74, 75, 76, 77—CYLS. 8—AXLE OWN

*SU847 (Front of Front, Right Side)
*SU848 (Front of Front, Left Side)
*SU848 (Rear of Front, Right Side)
*SU847 (Rear of Front, Left Side)
*SU845 (Rear of Rear, Right Side)
*SU835 (Rear of Rear, Left Side)

MODELS 83, 84, 85, 87—CYLS. 6-8—AXLE OWN

*SU847 (Front of Front, Right Side)
*SU848 (Front of Front, Left Side)
*SU848 (Rear of Front, Right Side)
*SU847 (Rear of Front, Left Side)
*SU845 (Rear of Rear, Right Side)
*SU835 (Rear of Rear, Left Side)

MODELS 89, 112—CYLS. 6—AXLE OWN

MODELS SIX AND EIGHT—CYLS. 6-8

Shock Absorber—Grommet 12 HB724

MODELS ALL

Radius Arm Bushing 4 HB744

MODELS R—CYLS. 4—AXLE OWN

MODELS R—CYLS. 4—AXLE OWN

Front	2	0179	0033	Front	2	0179	0033
Rear	4	0179	0033	Rear	4	0179	0033

MODELS A1 TO A5—CYLS. 6—AXLE OWN

Front	2	0224	0056	Front	2	0226	0057
Rear	4	0225	0056	Rear	4	0225	0056

MODELS A6, CENTURY 6—CYLS. 6—AXLE OWN

Front Up.	2	0270	0010	Front	2	0271	0057
Front Lr.	2	0270	0056	Rear Up.	2	0270	0010
Rear	2	0224	0056	Rear Lr.	2	0270	0056

MODELS S, S2 TO 24701—CYLS. 6—AXLE OWN

*T706 *T709 Front 2 0320 007 Front 2 0321 0068
SU808 SU806

MODELS S2 AFTER 24701, 214, 216—CYLS. 6—AXLE OWN

*T707 *T709
SU805 SU806

MODELS E1—CYLS. 8—AXLE OWN

Front	2	0223	0033	Front	2	0223	0033
Rear	4	0223	0033	Rear	4	0223	0033

MODELS E2—CYLS. 8—AXLE OWN

Front	2	0223	0033	Front	2	0223	0033
Rear	4	0223	0033	Rear	4	0223	0033

MODELS CENTURY 8, M, 125" W. B.—CYLS. 8—AXLE OWN

Front	2	0223	0033	Front	2	0223	0033
Rear	4	0223	0033	Rear	4	0223	0033

MODELS CENTURY 8, M, 120" W. B.—CYLS. 8—AXLE OWN

Front Up.	2	0268	0010	Front	2	0269	0034
Front Lr.	2	0268	0020	Rear Up.	2	0268	0010
Rear	2	0268	0020	Rear Lr.	2	0268	0020

MODELS CENTURY 8, M, 120" W. B.—CYLS. 8—AXLE OWN

Front Up.	2	0268	0010	Front	2	0269	0034
Front Lr.	2	0268	0020	Rear Up.	2	0268	0010
Rear	2	0268	0020	Rear Lr.	2	0268	0020

MODELS C, 221—CYLS. 8—AXLE OWN

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

Hu-In Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.
HUPMOBILE — 1930																	
295	2491	2954				ES1	ET1										
MODELS H, U—CYLS. 8—AXLE OWN																	
										Front Up.	2	0322	0010	Front	2	0323	0034
										Front Lr.	2	0322	0020	Rear Up.	2	0324	0010
										Rear Up.	2	0322	0010	Rear Lr.	2	0324	0020
										Rear Lr.	2	0322	0020				
HUPMOBILE — 1931-32																	
288	1961	1961				ES1	ET13										
MODELS L8, 218—CYLS. 8—AXLE OWN																	
HUPMOBILE — 1932																	
295	2491	2954															
MODELS 225, 237—CYLS. 8—AXLE OWN																	
HUPMOBILE — 1932-35																	
321	3213	2841															
MODELS 222, 226, 322, 326, 427T, 422F, 527T—CYLS. 8—AXLE OWN																	
HUPMOBILE — 1934																	
						RS26	RT47										
						ES7	ET40										
MODELS LIGHT SIX W, AIRFLOW J—CYLS. 6—AXLE OWN																	
HUPMOBILE — 1934-35																	
378	2841	2841															
MODELS K321, 421, 521—CYLS. 6-8—AXLE OWN																	
HUPMOBILE — 1935-36																	
						ES47	ET41										
						(Int. Rod Fact. Dup.)											
MODELS D, G—CYLS. 6																	
INDIANA TRUCK — 1930-31																	
319	2471	2471				ES1	ET13										
MODELS 64M—CYLS. 6—AXLE COLUM.																	
INDIANA TRUCK — 1931-32																	
						ES1	ET13										
MODELS 120, 2 T—CYLS. 6—AXLE COLUM. (Int. Rod Fact. Dup.)																	
INDIANA TRUCK — 1932-35																	
322	3221	3221															
MODELS 85, 95, 95DR, 1½, 2, 2½ T—CYLS. 6—AXLE TIMKEN																	
INDIANA TRUCK — 1936																	
MODELS 85																	
										Front	6	HB680		Front	6	HB701	
										Rear	6	HB680		Rear	6	HB701	
INTERNATIONAL TRUCK — 1924-28																	
331	3311	3311	567	5672													
MODELS SPEC. DELY. 6 SPEED, SPEC. 2 BRAKES—CYLS. 4—AXLE OWN																	
INTERNATIONAL TRUCK — 1927-29																	
336	3361	3361				ES20	ET26										
MODELS SPECIAL DELY. ¾ T—CYLS. 4—AXLE EATON (Int. Rod Fact. Dup.)																	
INTERNATIONAL TRUCK — 1926-29																	
336	3361	3361				ES20	ET26										
MODELS S26, S36, SL36, SF36, SD46, SF46, ¾, 1, 1½, 2 T—CYLS. 6—AXLE EATON (Int. Rod Fact. Dup.)																	
INTERNATIONAL TRUCK — 1928																	
						ES20	ET26										
MODELS SF, SL, SD, 1¼, 2 T—CYLS. 4—AXLE EATON (Int. Rod Fact. Dup.)																	
INTERNATIONAL TRUCK — 1921-26																	
239	2391	2391	561	5612	None												
MODELS SPEED TRUCK—CYLS. 4—AXLE OWN																	
INTERNATIONAL TRUCK — 1929-30																	
330	3301	3301				ES6	ET14										
MODELS SD46, SF46, 2 T—CYLS. 6—AXLE OWN																	
INTERNATIONAL TRUCK — 1929-30																	
329	3291	3291				ES7	ET6										
329AX (Complete King Pin Assembly)																	
MODELS SD, 6 SPEED, ¾, 1 T—CYLS. 4—AXLE EATON (Int. Rod Fact. Dup.)																	
INTERNATIONAL TRUCK — 1929-34																	
330	3301	3301				ES6	ET14										
MODELS S24, SL24, SL34, SF34, A4, 1¼, 2 T—CYLS. 4—AXLE OWN																	
INTERNATIONAL TRUCK — 1929-31																	
329	3291	3291				ES7	ET6										
329AX (Complete King Pin Assembly)																	
MODELS 4 BRAKES, A1, A2, AW2, B2, ¾, 1 1½T—CYLS. 4—AXLE OWN																	
INTERNATIONAL TRUCK — 1931-32																	
						ES20	ET26										
MODELS A1, 1 T—CYLS. 4—AXLE OWN																	
INTERNATIONAL TRUCK — 1931-32																	
326	3261	3261				ES6	ET15										
						(Int. Rod Fact. Dup.)											
MODELS A5, A6, 2, 3 T—CYLS. 6—AXLE OWN																	
INTERNATIONAL TRUCK — 1929-35																	
333	3331	3331															
MODELS HS54, W1, W2, 2½, 3½ T—CYLS. 4—AXLE OWN																	

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

INTERNATIONAL TRUCK 1929-35

332 3321 3321

INTERNATIONAL TRUCK 1931-38

327 3271 3271 ES20 ET32
327AX (Complete King Pin Assembly) RS26☞ (See Footnote)

INTERNATIONAL TRUCK 1933-36

327 3271 3271 RS26 (See Footnote)
327AX (Complete King Pin Assembly)

INTERNATIONAL TRUCK 1933-37

346 2321 2321
346AX (Complete King Pin Assembly)

INTERNATIONAL TRUCK 1934-36

346 2321 2321

346AX (Complete King Pin Assembly)

INTERNATIONAL TRUCK 1936

396 3961 3961

INTERNATIONAL TRUCK 1935-38

326 3261 3261 ES22 (See Footnote)

INTERNATIONAL TRUCK 1935-36

329 3291 3291 RS26 (See Footnote)

INTERNATIONAL TRUCK 1935-38

330 3301 3301 ES6 ET15 (Int. Rod Fact. Dup.)

INTERNATIONAL TRUCK 1937

396 3961 3961

INTERNATIONAL TRUCK 1937

397 3971 3971

INTERNATIONAL TRUCK 1937

333 3331 3331

INTERNATIONAL TRUCK 1937-38

327 3271 3271 RS26 (See Footnote)
327AX (Complete King Pin Assembly)

INTERNATIONAL TRUCK 1937-38

327 3271 3271 RS26 (See Footnote)
327AX (Complete King Pin Assembly)

INTERNATIONAL TRUCK 1937-38

398 3981 3981

INTERNATIONAL TRUCK 1937-38

330 3301 3301

JEWETT 1923-25

196 1961 1961 Ball Type Used

JEWETT 1926

232 2321 2321 Ball Type Used

JEWETT 1926

232 2321 2321 Ball Type Used

JORDAN 1924-25

109 1093 1094 Ball Type Used

MODELS HS74, W3, A7, A8, 3½, 5 T—CYLS. 4-6—AXLE OWN

MODELS M2, A3, AL3, B3, B4, C35, C40, C12, C35B, CS35B, C35T, CS35T, 1½, 2, 3T—CYLS. 4-6—AXLE OWN

☞For Rods with External Threads.
For Rods with Internal Threads.

MODELS B4, C40, C40F, C40T, 2-3 T—CYLS. 6—AXLE OWN

Front	2	0367	0034	Front	2	0369	00103
Rear Up.	2	0368	0010	Rear Up.	2	0370	00104
Rear Lr.	2	0368	0022	Rear Lr.	2	0370	00105

MODELS C1, D1, C5, D2, ½T—CYLS. 4-6—AXLE OWN

MODELS C1, C5, ½ T—CYLS. 4-6—AXLE OWN

Front	2	0371	007	Front	2	0371	007
Rear Up.	2	0372	0052	Rear Up.	2	0372	0052
Rear Lr.	2	0372	007	Rear Lr.	2	0372	007

MODELS C15, ¾, 1 T—CYLS. 6—AXLE OWN

Front	2	0371	007	Front	2	0373	00106
Rear Up.	2	0372	0052	Rear Up.	2	0374	00106
Rear Lr.	2	0372	007	Rear Lr.	2	0374	00107

MODELS A5, A6, C55, C60, C55F, C55T, C60T, D50, D246F, D246T, 3½-5T—CYLS. 6—AXLE OWN 300

MODELS C30, 1½ T—CYLS. 6—AXLE OWN 103

MODELS C50, C300, C40F, C40T, CS40T, 3-4 T—CYLS. 6 AXLE OWN 251

MODELS D15, ¾, 1 T—CYLS. 6—AXLE OWN

MODELS D40, 2-3 T—CYLS. 6—AXLE OWN

MODELS DR70, 4-6 T.—CYLS. 6—AXLE OWN

MODELS D30, DS30, D186T, DS186T—CYLS. 6—AXLE OWN

MODELS D35, DS35, D35B, DS35B—CYLS. 6—AXLE OWN

MODELS D60, DR60, DR346T, D346F—CYLS. 6—AXLE OWN

MODELS D300, DS300, 1½, 2 T—CYLS. 6—AXLE OWN

MODELS 23-25, 4 BRAKES—CYLS. 6—AXLE SALIS.

Front	2	0123	0019	Front	2	0124	0040
Rear	4	0122	0019	Rear	4	0122	0019

MODELS NEW-DAY, 6-40—CYLS. 6—AXLE TIMK.

Front	2	0123	0063	Front	2	0239	0053
Rear	4	0122	0063	Rear	4	0122	0063

MODELS 6-45—CYLS. 6—AXLE TIMK.

Front	2	0123	0063	Front	2	0240	0053
Rear	4	0122	0063	Rear	4	0122	0063

MODELS GL8, SERIAL 63,000 AND UP—CYLS. 8—AXLE EATON

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

Jo-Li

Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

JORDAN 1924-26
197 1971 1971 Ball Type Used

JORDAN 1928
207 2071 2071 Ball Type Used

JORDAN 1929-30
248 2481 2481 ES1 ET13
2481SB 2481SB

JORDAN 1929-30
185 2351 2351 ES1 ET13

KISSEL 1925-26
197 1971 1971 Ball Type Used

KLEIBER TRUCK 1930-31
328 3281 3281

LAFAYETTE 1934
209 2091 2091 ES45 ET57
(Int. Rod Fact. Dup.)

LAFAYETTE 1934-35
209 2091 2091 ES45 ET56
(Int. Rod Fact. Dup.)

LAFAYETTE 1936
386 3861 3861 ES62
(Int. Rod Fact. Dup.)

LAFAYETTE 1937-38
386 3861 3861 ES62 ET65
(Int. Rod Fact. Dup.)

LA FRANCE TRUCK 1930-32
328 3281 3281

LARRABEE TRUCK 1930-32
328 3281 3281

LA SALLE 1927-28
175 1481 1481 ES2 ET2
175AX (Complete King Pin Assembly)

LA SALLE 1929
175 1481 1481 ES2 ET5
175AX (Complete King Pin Assembly)

LA SALLE 1930-31
291 Brg. Used ES10 ET14

LA SALLE 1932-33
291 Brg. Used ES2 ET14

LA SALLE 1934
363 2421 2421 Right Hand
363AX Assembly ☞ES38 ET52
♂Complete King Left Hand
Pin Assembly Assembly ☞ES39 ET52
(Int. Rod Fact. Dup.)

LA SALLE 1935-36
363 2421 2421 Right Hand
363AX Assembly ☞ES47 ET52
♂Complete King Left Hand
Pin Assembly Assembly ☞ES47 ET52
(Int. Rod Fact. Dup.)

LA SALLE 1937-38
392 3601 3601 Right Hand
392AX Assembly ☞ES59 ET63
♂Complete King Left Hand
Pin Assembly ☞ES59 ET63

LINCOLN 1920-27
113 Brg. 1992 549 5014 5494

MODELS A—CYLS. 8—AXLE TIMK.

MODELS JE, JJ—CYLS. 8—AXLE TIMK.

MODELS 6E—CYLS. 6—AXLE COLUM.

MODELS 8G, 90—CYLS. 8—AXLE COLUM.

MODELS 6-55, 75,—CYLS. 6-8—AXLE TIMK.

MODELS 52, 54, 1½, 2 T—CYLS. 6—AXLE TIMK. 12703H

MODELS SIX, ARTICULATED AXLE—CYLS. 6—AXLE OWN
*SU814 *SU811

MODELS SIX, 3510, STRAIGHT AXLE—CYLS. 6—AXLE OWN
*SU814 *SU811

MODELS 3610—CYLS. 6—AXLE OWN
*SU814 *SU836

MODELS 37-10, 38-10—CYLS. 6—AXLE OWN
*SU814 *SU850

MODELS D, 1, 1½ T—CYLS. 6—AXLE TIMK. 12703H

MODELS 25, 35, 1½, 2 T—CYLS. 6—AXLE TIMK. 12703

MODELS 303—CYLS. 8—AXLE OWN

Front	2	0256	0034	Front	2	0256	0034
Rear Up.	2	0257	0036	Front	2	0258	0036
Rear Lr.	2	0257	0034	Rear	2	0256	0034

MODELS 328—CYLS. 8—AXLE OWN

Front	2	0256	0034	Front	2	0256	0034
Rear Up.	2	0257	0036	Front	2	0258	0036
Rear Lr.	2	0257	0034	Rear	2	0256	0034

MODELS 340, 345—CYLS. 8—AXLE OWN

MODELS 345B, 345C—CYLS. 8—AXLE OWN

MODELS 350—CYLS. 8—AXLE OWN
*SU817 (Rear of Rear)

MODELS 35-50, 36-50—CYLS. 8—AXLE OWN
*SU817 (Rear of Rear) Front 4 HB734

MODELS 37-50, 38-50—CYLS. 8—AXLE OWN
*SU817 (Rear of Rear)

(Int. Rod Fact. Dup.)

MODELS ALL—CYLS. 8—AXLE OWN

Front	2	0211	0046	Front	2	0212	0051
Rear	4	0211	0046	Rear	4	0211	0046

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.
(6-1-38)

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.
LINCOLN 1927-32																	
273	2631	2631	Ball Type Used														
LINCOLN 1936																	
385	2863	2864															
	2863SB	2864SB															
LOCOMOBILE 1925-28																	
211	1511	1511	Ball Type Used														
MACK TRUCK 1916-30																	
229	2293	2294	Ball Type Used														
MACK TRUCK 1916-28																	
230	2303	2304	Ball Type Used														
MACK BUS 1916-27																	
229	2293	2294	Ball Type Used														
MACK JR. TRUCK 1936-37																	
	3751	3751				RS25 (See Footnote)											
MACK JR. TRUCK 1936-37																	
377	3771	3771				ES56 (See Footnote)											
MACK JR. TRUCK 1936-37																	
377	3771	3771				ES56 (See Footnote)											
MACK JR. TRUCK 1936																	
376	3351	3351															
MACK JR. TRUCK 1936																	
376	3351	3351															
MACK JR. BUS 1936																	
377	3771	3771															
MARMON 1928-29																	
264	2643	2644	Ball Type Used														
MARMON 1927																	
252	2521	2521				ES7	ET6										
MARMON 1928-30																	
252	1961	1961				ES7	ET6										
MARMON 1928-29																	
196	1961	1961				ES7	ET6										
MARMON 1930-31																	
288	2883	1961				ES7	ET6										
MARMON 1930-31																	
233	2331	3084				ES6	ET5										
MARMON 1932																	
						ES6	ET5										
MARQUETTE 1930																	
242	2421	2421				ES13	ET11										
242AX (Complete King Pin Assembly)																	
MASSEY-HARRIS TRACTOR 1927-35																	
409	4091	4091															
MASSEY-HARRIS TRACTOR 1936																	
410	4101	4101															
MAXWELL 1920-22																	
129	1293	1294	516	5162	None												

MODELS ALL AFTER PROD. NO. 45569—CYLS. 8—AXLE OWN

Front	2	0211	0046	Front	2	0212	0051
Rear	4	0211	0046	Rear	4	0211	0046

MODELS ZEPHYR—CYLS. 12—AXLE OWN

MODELS JR. 8—CYLS. 8—AXLE OWN

MODELS AB, 1, 1½, 2, 2½ T—CYLS. 4—AXLE OWN

MODELS AC, 3½, 5, 5½, 6½, 7 T—CYLS. 4—AXLE OWN

MODELS AB, 25 PASS.—CYLS. 4—AXLE OWN

MODELS 1MA, ½ T—CYLS. 6—AXLE OWN

*SU814 (Front of Rear)
*SU819 (Rear of Rear)

MODELS 10MA, 10MB, 10MX, 20MA, 20MB, 20MX, 1½-2 T—CYLS. 6—AXLE OWN

Front Up.	2	0375	0067	Front	2	0376	00108
Front Lr.	2	0375	0018	Rear Up.	2	0376	00109
Rear	2	0375	0018	Rear Lr.	2	0376	00108

MODELS 30M, 30MA, 30MB, 30MX, 2-3 T—CYLS. 6—AXLE OWN

Front Up.	2	0377	0075	Front	2	0378	00110
Front Lr.	2	0377	0035	Rear Up.	2	0378	00111
Rear	2	0377	0035	Rear Lr.	2	0378	00110

MODELS 90MT, 90MTA, 90MTS, 90MTX, 90MTSX, BUS—CYLS. 6—AXLE OWN

				Rear Up.	2	0379	00113
Rear	2	0379	00112	Rear Lr.	2	0379	00112

MODELS 30MTA, 30MTX, 2-3 T—CYLS. 6—AXLE OWN

Rear	2	0378	00110	Rear Up.	2	0378	00111
				Rear Lr.	2	0378	00110

MODELS 90MA, 90MS, 90MX, 90MSX—CYLS. 6—AXLE OWN

MODELS 75 —CYLS. 6—AXLE OWN

MODELS LITTLE 8—CYLS. 8—AXLE SALIS.

MODELS 68, 69—CYLS. 8—AXLE SALIS.

MODELS 78—CYLS. 8—AXLE SALIS.

MODELS ROOSEVELT, 70—CYLS. 8—AXLE SALIS.

*T705 *T708
SU808 SU807

MODELS 79, BIG 8—CYLS. 8—AXLE SALIS.

MODELS 8-125, 16—CYLS. 8-16—AXLE SALIS.

MODELS ALL—CYLS. 6—AXLE OWN

*T710 *T712	Front	2	062	0012	Front	2	0301	0022
SU802 SU801							

MODELS CERTIFIED, 20-30 26-41, 25—CYLS. 4—AXLE OWN

MODELS PACEMAKER PA—CYLS. 4—AXLE OWN

MODELS ALL—CYLS. 4—AXLE OWN

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

Ma-Na Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.
MAXWELL 1922-24										**MODELS ALL—CYLS. 4—AXLE OWN**							
129	1521	1521	516	5162	None					Front	2	0128	0020	Front	2	0129	0034
										Rear	4	0128	0020	Rear	4	0129	0034
MAXWELL 1925										**MODELS ALL—CYLS. 4—AXLE OWN**							
129	1521	1521	516	5162	None					Front	2	0130	0020	Front	2	0131	0034
										Rear	4	0130	0020	Rear	4	0131	0034
McCORMICK DEERING TRACTOR 1924-36										**MODELS 10-20, IND. 20, I12, O12, W12, I30—CYLS. 4—AXLE OWN**							
407	4071	4071															
McCORMICK DEERING TRACTOR 1924-35										**MODELS 15-30, 22-36, IND. 30—CYLS. 4—AXLE OWN**							
406	4061	4061															
MONROE 1935										**Shock Absorber—Grommet**			12	HB724			
MOON 1925-26										**MODELS SERIES A—CYLS. 6—AXLE SALIS.**							
196	1961	1961	Ball Type Used														
MOON 1926-29										**MODELS 6-60, 6-72—CYLS. 6—AXLE COLUM.**							
248	2481	2481	Ball Type Used														
	2481SB	2481SB															
MOON 1928										**MODELS 8-80—CYLS. 8—AXLE COLUM.**							
185	1851	1851	Ball Type Used														
MORELAND TRUCK 1929-32										**MODELS RR6, RR7, 1½, 2 T—CYLS. 6—AXLE TIMK. 12703**							
328	3281	3281															
MORELAND TRUCK 1931-35										**MODELS B13, 15, 16, 18, 2½-4½T—CYLS. 6—AXLE TIMKEN**							
403	4031	4031															
NASH 1920-24										**MODELS 4-41, 4-48—CYLS. 4—AXLE OWN**							
159	1591	1591	536	5372	None												
NASH 1918-22										**MODELS 681-687—CYLS. 6—AXLE OWN**							
159	1591	1591	537	5372	None					Front	2	0180	0020	Front	2	0186	0035
										Rear Up.	2	0181	0016	Rear	4	0180	0023
										Rear Lr.	2	0180	0020				
NASH 1922-24										**MODELS 691-698—CYLS. 6—AXLE OWN**							
159	1591	1591	537	5372	None					Front	2	0183	0020	Front	2	0186	0035
										Rear Up.	2	0184	0016	Rear Up.	2	0187	0023
										Rear Lr.	2	0185	0020	Rear Lr.	2	0185	0023
NASH 1925-28										**MODELS ADVANCED SIX—CYLS. 6—AXLE OWN**							
212	1591	1591	559	5372	None					Front	2	0183	0020	Front	2	0186	0035
										Rear Up.	2	0233	0060	Rear	4	0185	0023
										Rear Lr.	2	0185	0023				
NASH 1929										**MODELS ADV. 6, SERIES 400—CYLS. 6—AXLE OWN**							
271	2713	2714				ES6	ET2			Front	2	0307	0020	Front	2	0308	0035
										Rear Up.	2	0307	0056	Rear Up.	2	0307	0076
										Rear Lr.	2	0307	0020	Rear Lr.	2	0307	0023
NASH 1926										**MODELS LIGHT SIX, STANDARD SIX—CYLS. 6—AXLE OWN**							
209	2091	2091	553	5532	None					Front	2	0215	0022	Front	2	0216	0034
										Rear	4	0215	0022	Rear	4	0215	0022
NASH 1927-28										**MODELS STD. SIX—CYLS. 6—AXLE OWN**							
209	2091	2091	565	5532	None					Front	2	0215	0022	Front	2	0216	0034
										Rear	4	0215	0022	Rear	4	0215	0022
NASH 1929										**MODELS STANDARD SIX, SERIES 400—CYLS. 6—AXLE OWN**							
209	2091	2091	565	5532	None	ES7	ET7			Front	2	0215	0022	Front	2	0216	0034
										Rear Up.	2	0215	0010	Rear Up.	2	0215	0010
										Rear Lr.	2	0215	0022	Rear Lr.	2	0215	0022
NASH 1925-28										**MODELS SPECIAL SIX—CYLS. 6—AXLE OWN**							
159	1591	1591	560	5372	None					Front	2	0234	0061	Front	2	0236	0062
										Rear	4	0235	0020	Rear	4	0237	0020
NASH 1929										**MODELS SPEC. 6, SER. 400, TO NO. B150202—CYLS. 6—AXLE OWN**							
270	2701	2701				ES6	ET2			Front	2	0309	0020	Front	2	0316	0034
										Rear Up.	2	0310	0014	Rear Up.	2	0310	0056
										Rear Lr.	2	0310	0020	Rear Lr.	2	0310	0020

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

(6-1-38)

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES	
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring

NASH ——— 1929

270	2701	2701	ES6	ET2

NASH ——— 1930

374R 374L	2091	2091	ES7	ET7 (Int. Rod Fact. Dup.)

NASH ——— 1930

294	2713	2714	ES6	ET2

NASH ——— 1930

292	2713	2714	ES6	ET2

NASH ——— 1931

209	2091	2091	ES7	ET7 (Int. Rod Fac. Dup.)

NASH ——— 1931

374R 374L	2091	2091	ES7	ET7 (Int. Rod Fact. Dup.)

NASH ——— 1931

374R 374L	2091	2091	ES20	ET36 (Int. Rod Fact. Dup.)

NASH ——— 1930-33

345	3453	2714	ES6	ET2

NASH ——— 1932

209	2091	2091	ES7	ET7

NASH ——— 1932

209	2091	2091	ES7	ET7

NASH ——— 1932

374R 374L	2091	2091	ES20	ET36

NASH ——— 1932-33

374R 374L	2091	2091	ES20	ET26 (Int. Rod Fact. Dup.)

NASH ——— 1932

209	2091	2091	ES7	ET7

NASH ——— 1933

209	2091	2091	ES45	ET57 (Int. Rod Fac. Dup.)

NASH ——— 1934

209	2091	2091	ES45	ET57 (Int. Rod Fac. Dup.)

NASH ——— 1933-34

209	2091	2091	ES45	ET57 (Int. Rod Fac. Dup.)

NASH ——— 1934

345	3453	2714	ES6	ET2

NASH ——— 1935

209	2091	2091	ES45	ET57 (Int. Rod Fact. Dup.)

NASH ——— 1935

209	2091	2091	ES45	ET57 (Int. Rod Fact. Dup.)

NASH ——— 1936

209	2091	2091	RS26	RT38 (Int. Rod Fact. Dup.)

NASH ——— 1936

386	3861	3861	ES62 (See Footnote)	

SPRING BOLTS AND BUSHINGS							
FRONT SPRING				REAR SPRING			
Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

MODELS SPEC. 6, SER. 400, AFTER NO. B150202—CYLS. 6—AXLE OWN

Front	2	0311	0020	Front	2	0316	0034
Rear Up.	2	0312	0014	Rear Up.	2	0312	0056
Rear Lr.	2	0312	0020	Rear Lr.	2	0312	0020

MODELS SINGLE SIX—CYLS. 6—AXLE OWN

*T725 *T717 SU802 SU801	Front	2	0215	0022	Front	2	0216	0034

MODELS TWIN IGNITION SIX—CYLS. 6—AXLE OWN

Front	2	0311	0020	Front	2	0316	0034
Rear Up.	2	0312	0014	Rear Up.	2	0312	0056
Rear Lr.	2	0312	0020	Rear Lr.	2	0312	0020

MODELS TWIN IGNITION EIGHT—CYLS. 8—AXLE OWN

MODELS 6-60—CYLS. 6—AXLE OWN

*T724 *T712
SU802 SU801

MODELS 8-70—CYLS. 8—AXLE OWN

*T725 *T717
SU802 SU801

MODELS 8-80—CYLS. 8—AXLE OWN

*T716 *T717
SU802 SU801

MODELS 8-90, 9-90, 10-90, 11-90—CYLS. 8—AXLE OWN

MODELS 9-60—CYLS. 6—AXLE OWN

(Int. Rod Fact. Dup.)

MODELS 9-70—CYLS. 8—AXLE OWN

(Int. Rod Fact. Dup.)

MODELS 9-80—CYLS. 8—AXLE OWN

(Int. Rod Fact. Dup.)

MODELS 10-80, 11-80—CYLS. 8—AXLE OWN

Front	4	HB680	Front	4	HB686
Rear	8	HB680	Rear	8	HB680

MODELS 1060-1070—CYLS. 6-8—AXLE OWN

(Int. Rod Fact. Dup.)

MODELS 1120 BIG 6, 1130 STD. 8—CYLS. 6-8—AXLE OWN

*SU814 *SU811

MODELS 1220, BIG 6—CYLS. 6—AXLE OWN

*SU814 *SU811 Front 4 HB691

MODELS 1170 SPECIAL 8, 1280 ADV. 8—CYLS. 8—AXLE OWN

*SU814 *SU811

MODELS 1290 AMB. 8—CYLS. 8—AXLE OWN

Front	4	HB684
Rear	4	HB683

MODELS ADV. 6, 3520—CYLS. 6—AXLE OWN

*SU814 *SU811 Front 4 HB709

MODELS AMB. 8, 3580—CYLS. 8—AXLE OWN

*SU814 *SU811 Front 4 HB709

MODELS 3620 AMBASSADOR—CYLS. 6

*SU814 *SU811 Front 4 HB709

MODELS 3640 LIGHT SIX—CYLS. 6—AXLE OWN

*SU814 *SU836 Front 4 HB709

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

NASH **1936**
209 2091 2091 RS26 RT38 (Int. Rod Fact. Dup.)

MODELS 36-80—CYLS. 8—AXLE OWN
*SU814 *SU811 Front 4 HB709

NASH **1937-38**
386 3861 3861 ES62 ET65 (Int. Rod Fact. Dup.)

MODELS 3720, 3820—CYLS. 6—AXLE OWN
*SU814 *SU850

NASH **1937-38**
209 2091 2091 ES63 RT38 (Int. Rod Fact. Dup.)

MODELS 3780, 3880—CYLS. 8—AXLE OWN
*SU814 *SU850

OAKLAND **1920-23**
134 1341 1341 506 5062 None

MODELS 34C, 34D, 6-44—CYLS. 6—AXLE OWN

OAKLAND **1923-27**
153 1531 1531 Ball Type Used

MODELS 6-54, 6-54B, OS, O6, GTR. 6—CYLS. 6—AXLE OWN

Front	2	0138	0022	Front	2	0137	0034
Rear	4	0138	0022	Rear	4	0138	0022

OAKLAND **1928-29**
153 1531 1531 ES13 ET11

MODELS AA6—CYLS. 6—AXLE OWN

Front	2	0138	0022	Front	2	0137	0034
Rear	4	0138	0022	Rear	4	0138	0022

OAKLAND **1930-31**
242 2421 2421 ES13 ET11

MODELS V8—CYLS. 8—AXLE OWN
*T711 *T712 Front 2 0317 0020 Front 2 0318 0034
SU802 SU801

OLDSMOBILE **1918-21**
108 1051 1051 506 5062 None

MODELS 45, 46—CYLS. 8—AXLE OWN

OLDSMOBILE **1921-24**
134 1341 1341 506 5062 None

MODELS 47, 43A—CYLS. 4-8—AXLE OWN

OLDSMOBILE **1924-26**
151 1511 1511 505 5052 None

MODELS 30A, B, C, D—CYLS. 6—AXLE OWN

Front	2	0146	0022	Front	2	0145	0022
Rear Up.	2	0146	0010	Rear Up.	2	0146	0010
Rear Lr.	2	0146	0022	Rear Lr.	2	0146	0022

OLDSMOBILE **1927**
242 2421 2421 Ball Type Used
242AB (Complete King Pin Assembly)

MODELS 30E (4 BRAKES)—CYLS. 6—AXLE OWN

Front	2	0146	0022	Front	2	0145	0022
Rear Up.	2	0146	0010	Rear Up.	2	0146	0010
Rear Lr.	2	0146	0022	Rear Lr.	2	0146	0022

OLDSMOBILE **1928-30**
242 2421 2421 ES13 ET11
242AB (Complete King Pin Assembly)

MODELS F28, F29, F30—CYLS. 6—AXLE OWN
*T710 *T712 Front 2 0272 0022 Front 2 0272 0022
SU802 SU801

OLDSMOBILE **1931**
242 2421 2421 ES7 ET11
242AB (Complete King Pin Assembly)

MODELS F31—CYLS. 6—AXLE OWN
*T711 *T712 Front 2 0272 0022 Front 2 0272 0022
SU802 SU801

OLDSMOBILE **1932**
242 2421 2421 RS27 RT39
♂ Fact. Dup. ES7 ET9
242AB (Complete King Pin Assembly)

MODELS F32, L32—CYLS. 6-8—AXLE OWN
*T711 *T712 Front 2 0272 0022 Front 2 0272 0022
SU802 SU801

OLDSMOBILE **1933**
242 2421 2421 RS27 RT46 (Int. Rod Fact. Dup.)
242AB (Complete King Pin Assembly)

MODELS F33-L33—CYL. 6-8—AXLE OWN
*SU816 *SU817

OLDSMOBILE **1934**
363 2421 2421 Right Hand Assembly ☞ES38 ET51
363AX
♂ Complete King Pin Assembly Left Hand Assembly ☞ES39 ET51 (Int. Rod Fact. Dup.)

MODELS F34—CYLS. 6—AXLE OWN
*SU817 (Rear of Rear)

OLDSMOBILE **1934**
363 2421 2421 Right Hand Assembly ES38 ET52
363AX
♂ Complete King Pin Assembly Left Hand Assembly ☞ES39 ET52 (Int. Rod Fact. Dup.)

MODELS L34—CYLS. 8—AXLE OWN
*SU817 (Rear of Rear)

OLDSMOBILE **1935-36**
363 2421 2421 Right Hand Assembly ☞ES47 ET66
363AX
♂ Complete King Pin Assembly Left Hand Assembly ☞ES47 ET66 (Int. Rod Fact. Dup.)

MODELS F35, F36, L35, L36—CYLS. 6-8—AXLE OWN

*SU817 (Rear of Rear)

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.
(6-1-38)

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.
OLDSMOBILE 1937-38										**MODELS F37, L37, F38, L38—CYLS. 6-8—AXLE OWN**							
392	3601	3601	Right Hand Assembly			☞ES58	ET66										
392AX ♂Complete King Pin Assembly			Left Hand Assembly			☞ES58 (Int. Rod Fact. Dup.)	ET66										
OVERLAND 1919-22										**MODELS FOUR—CYLS. 4—AXLE OWN**							
138	1381	1381	522	5222	None					Rear	2	0147	008	Front	2	0147	008
														Rear	1	0147	008
OVERLAND 1923-26										**MODELS 91, 92—CYLS. 4—AXLE OWN**							
139	1391	1391	523	5232	None					Rear	2	0147	008	Front	2	0147	008
														Rear	1	0147	008
OVERLAND 1925-26										**MODELS 6-93—CYLS. 6—AXLE OWN**							
218	2181	2181	523	5232	None												
OVERLAND 1927										**MODELS 6-93A, WHIPPET 6—CYLS. 6—AXLE OWN**							
220	2201	2201	Ball Type Used														
OVERLAND 1926-27										**MODELS 96, WHIPPET 4—CYLS. 4—AXLE OWN**							
220	2201	2201	Ball Type Used							Front	2	0238	007	Front	2	0238	007
										Rear	4	0238	007	Rear	4	0238	007
OVERLAND 1928-30										**MODELS 96A, 98, 98A, WHIPPET 4-6—CYLS. 4-6—AXLE OWN**							
277	2201	2201	Ball Type Used							*T729 *T708 SU805 SU807	Front	2	08	007	Front	2	08	007
277A (Assembly-King Pins and Bushings)																	
PACKARD 1923-25										**MODELS 126, 226, 133, 233—CYLS. 6—AXLE OWN**							
182	1823	1824	558	5022	None					Front	2	0202	0034	Front	2	0204	0050
										Rear	4	0203	0049	Rear	4	0203	0049
PACKARD 1923-24										**MODELS 136, 143—CYLS. 8—AXLE OWN**							
181	Brg.	Used	Ball Type Used							Front	2	0204	0050	Front	2	0204	0050
										Rear	4	0203	0049	Rear	4	0203	0049
PACKARD 1925										**MODELS 236-243—CYLS. 8—AXLE OWN**							
181	Brg.	Used	Ball Type Used							Front	2	0205	0050	Front	2	0204	0050
										Rear	4	0206	0049	Rear	4	0203	0049
PACKARD 1926-27										**MODELS 336-343—CYLS. 8—AXLE OWN**							
181	Brg.	Used	Ball Type Used							Front Up.	2	0205	0077	Front	2	0208	0050
										Front Lr.	2	0205	0034	Rear Up.	2	0207	0081
										Rear	2	0305	0034	Rear Lr.	2	0207	0050
PACKARD 1926-27										**MODELS 326-333, 426-433—CYLS. 6-8—AXLE OWN**							
181	Brg.	Used	Ball Type Used							Front Up.	2	0205	0077	Front	2	0208	0050
										Front Lr.	2	0205	0034	Rear Up.	2	0207	0081
										Rear	2	0206	0034	Rear Lr.	2	0207	0050
PACKARD 1928										**MODELS 526-533—CYLS. 6—AXLE OWN**							
181	Brg.	Used	Ball Type Used							Front Up.	2	0205	0077	Front	2	0306	0050
										Front Lr.	2	0205	0034	Rear Up.	2	0207	0081
										Rear	2	0206	0034	Rear Lr.	2	0207	0050
PACKARD 1928-29										**MODELS 443, 640, 645, 626, 633—CYLS. 8 AXLE OWN**							
181	Brg.	Used	Ball Type Used							Front Up.	2	0205	0077	Front	2	0306	0050
										Front Lr.	2	0205	0034	Rear Up.	2	0207	0081
										Rear	2	0305	0034	Rear Lr.	2	0207	0050
PACKARD 1930										**MODELS 726, 733, 740, 745—CYLS. 8—AXLE OWN**							
290	Brg.	Used	Ball Type Used							Front Up.	2	0205	0077	Front	2	0306	0050
										Front Lr.	2	0205	0034	Rear Up.	2	0207	0081
										Rear	2	0305	0034	Rear Lr.	2	0207	0050
PACKARD 1931										**MODELS 826-833, 840, 845—CYLS. 8—AXLE OWN**							
290	Brg.	Used	Ball Type Used														
PACKARD 1932										**MODELS 901, 902, 903, 904—CYLS. 8—AXLE OWN**							
290	Brg.	Used	Ball Type Used														
PACKARD 1933-36										**MODELS SERIES 1000, 1100, 1200, 1400—CYLS. 8—AXLE OWN**							
344	Brg.	Used	Ball Type Used														
PACKARD 1935-36										**MODELS 120-120B—CYLS. 8—AXLE OWN**							
366	3661	3661	Right Hand Assembly			☞ES48	ET59			T735 (Rear of Rear)							
			Left Hand Assembly			☞ES48 (Int. Rod Fact. Dup.)	ET59										

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

PACKARD — 1937-38

388 3881 3881 Right Hand Assembly ES48 ET59
388AX ♂ Complete King Pin Assembly Left Hand Assembly ES48 ET59 (Int. Rod Fact. Dup.)

PAIGE — 1924

183 1831 1831 Ball Type Used

PAIGE — 1925

213 2131 2131 Ball Type Used

PAIGE — 1926

232 2321 2321 Ball Type Used

PAIGE — 1926-27

196 1961 1961 Ball Type Used

PAIGE — 1926-27

233 2331 2331 Ball Type Used

PEERLESS — 1924-25

183 1831 1831 Ball Type Used

PEERLESS — 1924-26

197 1971 1971 Ball Type Used

PEERLESS — 1924-26

190 1414 1904 Ball Type Used

PEERLESS — 1927-28

185 2351 2351 Ball Type Used

PEERLESS — 1928-30

185 2351 2351 ES1 ET13

PEERLESS — 1927-30

248 2481 2481 ES1 ET13
2481SB 2481SB

PEERLESS — 1931-32

ES1 ET13

PIERCE ARROW — 1925-27

231 2313 2314 Ball Type Used

PIERCE ARROW — 1929-31

267 2671 2671 ES6 ET5

PIERCE ARROW — 1932

ES6 ET5

PIERCE ARROW — 1932

ES6 ET14

PIERCE ARROW TRUCK — 1921-27

244 2442 2442 563 5632 5632

PLYMOUTH — 1929

278 2071 2781 ES8 ET4
278AX (Complete King Pin Assembly)

PLYMOUTH — 1930-31

278 2071 2781 ES8 ET4 RS33 (See Footnote)
278AX (Complete King Pin Assembly)

MODELS 115C, 120C, 1600, 1601, 1602—CYLS. 6-8—AXLE OWN

MODELS 6-70 TO CHASSIS 155891—CYLS. 6—AXLE TIMK.

Front	2	0123	0019	Front	2	0127	0042
Rear	4	0123	0019	Rear	4	0125	0024

MODELS 6-70 AFTER CHASSIS 155891—CYLS. 6—AXLE TIMK.

Front	2	0123	0019	Front	2	0127	0042
Rear	4	0123	0019	Rear	4	0125	0024

MODELS 6-40, 6-45—CYLS. 6—AXLE TIMK.

Front	2	0123	0063	Front	2	0240	0053
Rear	4	0122	0063	Rear	4	0122	0063

MODELS 6-65, 6-72, 115" W. B.—CYLS. 6—AXLE SALIS.

Front	2	0123	0019	Front	2	0241	0040
Rear	4	0122	0019	Rear	4	0122	0019

MODELS 6-75, 8-85, 6-72, 125" W. B.—CYLS. 6-8—AXLE TIMK.

Front	2	0123	0063	Front	2	0241	0041
Rear	4	0122	0063	Rear	4	0123	0023

MODELS 66, 67—CYLS. 8—AXLE TIMK.

MODELS 6-70, 6-72—CYLS. 6—AXLE TIMK.

MODELS 6-70, 6-72—CYLS. 6—AXLE EATON

MODELS 6-80, 6-90—CYLS. 6—AXLE COLUM.

MODELS 6-91, ST. 8, 125—CYLS. 6-8—AXLE COLUM.

MODELS 6-60, 6-61, 6-81, 61A—CYLS. 6—AXLE COLUM.

MODELS A, B, C, MASTER, CUSTOM—CYLS. 8—AXLE COLUM.

MODELS 80—CYLS. 6—AXLE OWN

MODELS 133, 143, A, B, C, 41, 42, 43—CYLS. 8—AXLE OWN

MODELS 54—CYLS. 8—AXLE OWN

MODELS 51, 52, 53—CYLS. 12—AXLE OWN

MODELS X5, XA, XB, 2, 3 T—CYLS. 4—AXLE TIMK.

MODELS ALL—CYLS. 4—AXLE OWN

*T705 *T708 SU808 SU807	Front	2	0243	007	Front	2	0244	0014

MODELS ALL TO MARCH 15, 1931—CYLS. 4—AXLE OWN

*T705 *T708 SU808 SU807	Front	2	0243	007	Front	2	0244	0014

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

PLYMOUTH 1931

278 2071 2781 ES8 ET4 RS33 (See Footnote)
278AX (Complete King Pin Assembly)

PLYMOUTH 1932

278 2071 2781 ES7 ET9 RS33 (See Footnote)
278AX (Complete King Pin Assembly)

PLYMOUTH 1933

337 3371 3371 RS34 ET9
337AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

PLYMOUTH 1934

337 3371 3371 ES57
337AX (Complete King Pin Assembly) (See Footnote)

PLYMOUTH 1934

354 3541 3541 Right Hand
354AX Assembly ☞ES35 ET50
♂Complete King Left Hand
Pin Assembly Assembly ☞ES36 ET50
ES35R Also used on Drag Link End (Int. Rod Fact. Dup.)

PLYMOUTH 1934

356 3371 3371 Right Hand
356AX Assembly ☞ES35 ET50
♂Complete King Left Hand
Pin Assembly Assembly ☞ES36 ET50
ES35R Also used on Drag Link End (Int. Rod Fact. Dup.)

PLYMOUTH 1935

370 3701 3701 ES57 ET6
370AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)
ES35R Also used on Drag Link End

PLYMOUTH 1936

370 3701 3701 ES57 ET6
370AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)
ES70R Also used on Drag Link End.

PLYMOUTH 1937

370 3701 3701 ES57 ET64
370AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)
ES70R Also used on Drag Link End

PLYMOUTH 1938

370 3705 3701 ES57 ET64
♂Needle Bearing
370AB (Complete King Pin Assembly) (Int. Rod Fact. Dup.)
ES70R Drag Link End used with 16x6.00 and 16x6.50 Wheels

PLYMOUTH TRUCK 1938

370 3701 3701 ES35 ET64
370AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)
ES70R Also used on Drag Link End

PONTIAC 1926-27

236 2361 2361 550 5622 None
2361SB 2361SB 5622SB

PONTIAC 1928

266 2661 2661 ES10 ET10
2661SB 2661SB
266LP
♂Lock Pin for 266
387☞.005 O.S. for 266
266AX (Complete King Pin Assembly)
387AX (Complete King Pin Assembly)

MODELS ALL AFTER MARCH 15, 1931—CYLS. 4—AXLE OWN

*T722 *T709 SU808 SU806	Front	2	0243	007	Front	2	0244	0014

MODELS PB—CYLS. 4—AXLE OWN

*SU810 *SU811

MODELS PC-PD—CYLS. 6—AXLE OWN

*SU812 *SU813	Front	2	0346	0092	Front	2	0346	0092

MODELS PG—CYLS. 6—AXLE OWN

*SU812 *SU813	Front	2	0346	0092	Front	2	0346	0092

MODELS PE—CYLS. 6—AXLE OWN

*SU811 (Rear of Rear)					Front	2	0344	0091

MODELS PF—CYLS. 6—AXLE OWN

*SU813 (Rear of Rear)					Front	2	0344	0091

MODELS PJ—CYLS. 6—AXLE OWN

*SU833 (Right Side)					Front	2	0344	0091
*SU834 (Left Side)								
*SU835 (Rear of Rear)								

MODELS P1, P2—CYLS. 6—AXLE OWN

*SU810 (Front of Front, Right Side)					Front	2	0344	0091
*SU838 (Front of Front, Left Side)								
*SU839 (Rear of Front, Left Side)								
*SU835 (Rear of Rear)								
Rear of Front, Right Side	1	0350	0093					

MODELS P3, P4—CYLS. 6—AXLE OWN

*SU810 (Front of Front, Right Side)					Front	2	0345	0091
*SU838 (Front of Front, Left Side)								
*SU844 (Rear of Front, Left Side)								
*SU835 (Rear of Rear, Right Side)								
*SU845 (Rear of Rear, Left Side)								
Rear of Front, Right Side	1	0350	0093					

MODELS P5, P6—CYLS. 6—AXLE OWN

*SU810 (Front of Front, Right Side)					Front	2	0345	0091
*SU838 (Front of Front, Left Side)								
*SU844 (Rear of Front, Left Side)								
*SU835 (Rear of Rear, Right Side)								
*SU845 (Rear of Rear, Left Side)								
Rear of Front, Right Side	1	0350	0093					

MODELS PT57, ½ T—CYLS. 6—AXLE OWN

*SU810 (Front of Front, Right Side)
*SU838 (Front of Front, Left Side)
*SU842 (Rear of Rear, Right Side)
*SU843 (Rear of Rear, Left Side)

MODELS ALL—CYLS. 6—AXLE OWN

T701 T702 (See Footnote)	Front	2	0222	007	Front	2	0222	007
	Rear Up.	2	0222	0052	Rear Up.	2	0222	0052
	Rear Lr.	2	0222	007	Rear Lr.	2	0222	007
	(Above Spring Bolts are Thompson Quality)							
	Front	2	0242	007	Front	2	0242	007
	Rear Up.	2	0242	0052	Rear Up.	2	0242	0052
	Rear Lr.	2	0242	007	Rear Lr.	2	0242	007
	(Above Spring Bolts are Factory Duplicate)							

MODELS ALL TO MTR. NO. 410101—CYLS. 6—AXLE OWN

	Front	2	0222	007	Front	2	0222	007
	Rear Up.	2	0222	0052	Rear Up.	2	0222	0052
	Rear Lr.	2	0222	007	Rear Lr.	2	0222	007
	(Above Spring Bolts are Thompson Quality)							
	Front	2	0242	007	Front	2	0242	007
	Rear Up.	2	0242	0052	Rear Up.	2	0242	0052
	Rear Lr.	2	0242	007	Rear Lr.	2	0242	007
	(Above Spring Bolts are Factory Duplicate)							

Footnote: To replace conventional shackles with Tryons it is necessary to enlarge the hole in the hanger for rear of front and the hole in the frame for rear of rear from .690 to .762 to accommodate Tryon Pins.

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown. (6-1-38)

Po-Re

Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

PONTIAC — EARLY 1929

266 2661 2661 — ES10 ET10
2661SB 2661SB
266LP
♂ Lock Pin for 266
387☞.005 O.S. for 266
266AX (Complete King Pin Assembly)
387AX (Complete King Pin Assembly)

PONTIAC — LATE 1929-30

266 2661 2661 — ES10 ET10
2661SB 2661SB
266LP
♂ Lock Pin for 266
387☞.005 O.S. for 266
266AX (Complete King Pin Assembly)
387AX (Complete King Pin Assembly)

PONTIAC — 1931-32

266 2661 2661 — ES10 ET10
2661SB 2661SB
266LP
♂ Lock Pin for 266
387☞.005 O.S. for 266
266AX (Complete King Pin Assembly)
387AX (Complete King Pin Assembly)

PONTIAC — 1932

242 2421 2421 — ES10 ET10

PONTIAC — 1933

266 2661 2661 — RS29
2661SB 2661SB — (See Footnote)
266LP
♂ Lock Pin for 266
387☞.005 O.S. for 266
266AX (Complete King Pin Assembly)
387AX (Complete King Pin Assembly)

PONTIAC — 1934

351 Brg. Used — RS29
3515 3515 — (See Footnote)
♂ Replaces Needle Bearings
351AP (Complete King Pin Assembly)
M101☞Spindle Bushing.

PONTIAC — 1935-36

266 2661 2661 — ES23 ET11
266LP 2661SB 2661SB — RS29
♂ Lock Pin for 266 — (See Footnote)
266AX (Complete King Pin Assembly)

PONTIAC — 1935-36

351 Brg. Used — RS29
3515 3515 — (See Footnote)
♂ Replaces Needle Bearings
351AP (Complete King Pin Assembly)
M101☞Spindle Bushing.

PONTIAC — 1937-38

392 3601 3601 Right Hand Assembly — ☞ES58 ET66
392AX
♂ Complete King Pin Assembly — Left Hand Assembly — ☞ES58 ET66 (Int. Rod Fact. Dup.)

REO — 1920-27

219 1421 1421 526 5262 None

REO — 1927-28

196 1961 1961 — ES6 ET2

REO — 1927-28

246 2461 2461 — ES1 ET3

REO — 1929

196 1961 1961 — ES6 ET2

REO — 1929

246 2461 2461 — ES1 ET3

MODELS BIG SIX—CYLS. 6—AXLE OWN

*T711 *T712 SU802 SU801 — Front: 2 0138 0056 — Front: 2 0138 0056

MODELS BIG SIX—CYLS. 6—AXLE OWN

*T711 *T712 SU802 SU801 — Front: 2 0317 0056 — Front: 2 0317 0056

MODELS ALL—CYLS. 6—AXLE OWN

MODELS P8—CYLS. 8—AXLE OWN

MODELS ALL—CYLS. 8—AXLE OWN

T736 (Rear of Front) — Front: 2 0347 0090
T735 (Rear of Rear)

MODELS EIGHT—CYLS. 8—AXLE OWN

T735 (Rear of Rear) — Front: 2 0347 0090

MODELS STANDARD SIX, MASTER 6—CYLS. 6—AXLE OWN

T736 (Front of Front) — Front: 2 0347 0090

MODELS STRAIGHT EIGHT, DELUXE SIX, DELUXE EIGHT—CYLS. 6-8—AXLE OWN

MODELS 37-26, 37-28, 38-26DA, 38-28DA—CYLS. 6-8—AXLE OWN

MODELS T6, U6—CYLS. 6—AXLE OWN

Front: 2 0148 0022 — Front: 2 0150 0040
Rear: 4 0149 0022 — Rear: 4 0151 0022

MODELS WOLVERINE—CYLS. 6—AXLE SALIS.

Front: 2 0148 0020 — Front: 2 0274 0062
Rear: 4 0273 0020 — Rear: 4 0273 0020

MODELS FLYING CLOUD—CYLS. 6—AXLE OWN

Front: 2 0148 0020 — Front: 2 0274 0062
Rear: 4 0273 0020 — Rear: 4 0273 0020

MODELS MATE—CYLS. 6—AXLE SALIS.

MODELS MASTER—CYLS. 6—AXLE OWN

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.
(6-1-38)

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.
REO — 1930																	
196	1961	1961				ES6	ET8										
REO — 1930-31																	
246	2461	2461				ES1	ET13										
REO — 1931-32																	
246	2461	2461				ES1	ET1										
REO — 1931-32																	
246	2461	2461				ES1	ET1										
REO — 1933																	
246	2461	2461															
REO — 1933-35																	
375	3751	3751				ES56 (Int. Rod Fact. Dup.)	ET62										
REO — 1935-36																	
375	3751	3751				RS25 (See Footnote)											
REO TRUCK — 1918-26																	
143	1421	1421	526	5262	None												
REO TRUCK — 1925-27																	
240	2401	2401	526	5262	None												
REO TRUCK — 1928																	
196	1961	1961	Ball Type Used														
REO TRUCK — 1928																	
246	2461	2461				ES1	ET1										
REO TRUCK — 1929-30																	
307	3071	3071	Ball Type Used														
REO TRUCK — 1929-30																	
307	3071	3071				ES1	ET13										
REO TRUCK — 1928-30																	
307	3071	3071				ES1	ET1										
REO TRUCK — 1928-30																	
307	3071	3071				ES1	ET3										
REO TRUCK — 1928-29																	
334	3341	3341															
REO TRUCK — 1929-33																	
335	3351	3351															
REO TRUCK — 1933-34																	
376	3351	3351															
REO TRUCK — 1933-35																	
377	3771	3771				ES56 (Int. Rod Fact. Dup.)	ET62										
REO TRUCK — 1935-36																	
377	3771	3771				ES56 (Int. Rod Fact. Dup.)	ET62										
REO TRUCK — 1935-36																	
377	3771	3771				ES56 (Int. Rod. Fact. Dup.)	ET62										
REO — 1936																	
REPUBLIC TRUCK — 1927-29																	
239	2391	2391	561	5612	None												

MODELS 15—CYLS. 6—AXLE SALIS.
(Int. Rod Fact. Dup.)

MODELS 20, 25, FLYING CLOUD—CYLS. 6—AXLE OWN
(Int. Rod Fact. Dup.)

MODELS SIX, S, 6-21, 8-21—CYLS. 6-8—AXLE OWN
*T711 *T728
SU802 SU809

MODELS 8-25, 8-31, 8-35—CYLS. 8—AXLE OWN

MODELS ROYALE, 8-52—CYLS. 8—AXLE OWN

MODELS S, 2S, 3S, 7S—CYLS. 6—AXLE OWN
*SU818 *SU819

MODELS 6A, 6D—CYLS. 6—AXLE OWN
*SU814 *SU811

MODELS SPEEDWAGON, 1, 1¼ T—CYLS. 4—AXLE OWN

Front	2	0148	0022	Front	2	0150	0043
Rear	4	0149	0022	Rear Up.	2	0153	0044
				Rear Lr.	2	0151	0031

MODELS G TO NO. 975, 2 T—CYLS. 6—AXLE OWN

MODELS SPEEDWAGON, JR, BA—CYLS. 6—AXLE OWN

MODELS FA, FE, FF, FC, FD, GA, GC, GD, 1½, 2, 3 T—CYLS. 6—AXLE OWN

MODELS GOLD CROWN, 1½, 2, 3 T—CYLS. 6—AXLE OWN

MODELS FC, FD, 2 T—CYLS. 6—AXLE OWN

MODELS FA, FB, FD, 58½" W. T.—CYLS. 6—AXLE OWN

MODELS FA, FB, FD, 56¾" W. T.—CYLS. 6—AXLE OWN

MODELS GB, GC, GD, GE AFTER NO. 975, 2 T—CYLS. 6—AXLE OWN

MODELS GA, GB, GC, GD, 4H, 4J, 4K, 3, 4 T—CYLS. 6—AXLE OWN

MODELS 2H, 2J, 2K, 2HR, 2JR, 2KR, 3H, 3HR, 3J, 3K, 3M, 3MR—CYLS. 6—AXLE OWN

MODELS 2L4, 2LC4, 2LA4—CYLS. 6—AXLE OWN

MODELS 1A4, 1B4, 1C4, 1D4, 1½ T—CYLS. 6—AXLE OWN

Front Up.	2	0375	0067	Front	2	0376	00108
Front Lr.	2	0375	0018	Rear Up.	2	0376	00109
Rear	2	0375	0018	Rear Lr.	2	0376	00108

MODELS 2B4, 2D4, 2 T—CYLS. 6—AXLE OWN

Front Up.	2	0377	0075	Front	2	0378	00110
Front Lr.	2	0377	0035	Rear Up.	2	0378	00111
Rear	2	0377	0035	Rear Lr.	2	0378	00110

MODELS BUS 1L4, 1L5

Front	12	HB684	Rear	12	HB713

MODELS 75, 76, 77, 1¼ T—CYLS. 4—AXLE COLUM.

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

RICKENBACKER 1923-25
184 1843 1844 Ball Type Used

MODELS C, A—CYLS. 6—AXLE COLUM.

RICKENBACKER 1924-26
185 1851 1851 Ball Type Used

MODELS C—CYLS. 6—AXLE COLUM.

RICKENBACKER 1925
185 1851 1851 Ball Type Used

MODELS AC AFTER CAR NO. 17673—CYLS. 6—AXLE COLUM.

ROCKNE 1932-33
317 3171 3171 RS25 RT37 (Int. Rod Fact. Dup.)

MODELS 6-65, 10—CYLS. 6—AXLE OWN
*T731 *T732

ROCKNE 1932
284 2841 2841 ES5 ET9
284AX (Complete King Pin Assembly)

MODELS 6-75—CYLS. 6—AXLE OWN
*T706 *T723
SU808 SU807

ROLLIN 1923-25
186 1863 1864 Ball Type Used

MODELS ALL—CYLS. 4—AXLE COLUM.

ROOSEVELT 1929-30
288 2883 1961 ES7 ET6

MODELS ALL—CYLS. 8—AXLE SALIS.
*T705 *T708
SU808 SU807

RUGBY TRUCK 1928
233 2331 2331 Ball Type Used

MODELS EXPRESS L, 1 T—CYLS. 6—AXLE OWN

RUGBY TRUCK 1929-30
280 1641 1641 Ball Type Used
1641SB 1641SB

MODELS 401—CYLS. 4—AXLE OWN

RUGBY TRUCK 1929-30
222 1601 1601 Ball Type Used

MODELS MR, M2, 40—CYLS. 4—AXLE OWN

SCHACHT TRUCK 1930-32
328 3281 3281

MODELS 15, 20, 20A, 20HA, 1½, 2, 2½, 4 T—CYLS. 6—AXLE TIMK. 12703H

SALISBURY AXLE 1919-22
150 1503 1504 525 5252 5252

—AXLE OWN

SELDEN TRUCK 1930
328 3281 3281

MODELS 17, 37, 39C, 1½, 2, 2½ T—CYLS. 6—AXLE TIMK. 12703

SPICER 1935

Shock Absorber—Grommet 12-16 HB724

STAR 1923
162 1623 1624 541 5412 None
(Above King Bolt Tapped for Alemite)
250 1623 1624 541 5412 None
(Above King Bolt is Factory Duplicate)

MODELS ALL—CYLS. 4—AXLE OWN

Front	2	0201	0048	Front	2	0201	0048
Rear	4	0201	0048	Rear	4	0201	0048
(Above Spring Bolts are Factory Duplicate)							
Front	2	0213	0048	Front	2	0213	0048
Rear	4	0213	0048	Rear	4	0213	0048
(Above Spring Bolts are Tapped for Alemites)							

STAR 1924-25
163 1631 1631 542 5422 None
(Above King Bolt Tapped for Alemite)
251 1631 1631 542 5422 None
(Above King Bolt is Factory Duplicate)

MODELS ALL—CYLS. 4—AXLE OWN

Front	2	0214	0052	Front	2	0214	0052
Rear	4	0214	0052	Rear	4	0214	0052

STAR 1926
222 1601 1601 538 5382 None

MODELS ALL—CYLS. 4-6—AXLE OWN

Front	2	0222	007	Front	2	0222	007
Rear	4	0222	007	Rear	4	0222	007
(Above Spring Bolts are Thompson Quality)							
Front	2	0242	007	Front	2	0242	007
Rear	4	0242	007	Rear	4	0242	007
(Above Spring Bolts are Factory Duplicate)							

STERLING TRUCK 1930-31
328 3281 3281

MODELS DB9-64, DB11-64, 2, 2½ T—CYLS. 6—AXLE TIMK. 12703

STERLING TRUCK 1931-35
402 4021 4021

MODELS FD97S, FW97S, FC100, FD115, FW115, FC107—4-6 T—CYLS. 6—AXLE TIMKEN

STERLING TRUCK 1932-35
322 3221 3221

MODELS FB40, FB50, FB60, FB70, 1½-3 T—CYLS. 6—AXLE TIMKEN

STERLING TRUCK 1932-35
403 4031 4031

MODELS FB80, FD80, FC90, FD90, FB50, FB60, FB70, 2-4½ T—CYLS. 6—AXLE TIMKEN

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.
(6-1-38)

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

STEWART TRUCK — 1925-29
150 1503 1504 525 5252 5252

STEWART TRUCK — 1928-29
233 2331 2331 Ball Type Used

STEWART — 1929-31
275 2751 2751 Ball Type Used

STEWART TRUCK — 1929-30
323 3233 3234

STUDEBAKER — 1922-24
146 1463 1464 528 5282 None

STUDEBAKER — 1919-21
145 1453 1454 528 5282 None

STUDEBAKER — 1922-23
145 1453 1454 528 5282 None

STUDEBAKER — 1924-25
188 None 1882 528 5282 None

STUDEBAKER — 1926-27
188 None 1882 528 5282 None

STUDEBAKER — 1925-27
189 1892 1893 1894 Ball Type Used

STUDEBAKER — 1926-27
188 None 1882 528 5282 None

STUDEBAKER — 1927
269 2691 2691 ES5 ET9

STUDEBAKER — 1928
269 2691 2691 ES5 ET9

STUDEBAKER — 1929
269 2691 2691 ES5 ET9
(Int. Rod Fact. Dup.)

STUDEBAKER — 1930
284 2841 2841 ES5 ET9
284AX (Complete King Pin Assembly)
(Int. Rod Fact. Dup.)

STUDEBAKER — 1928
267 2671 2671 ES24 ET31

STUDEBAKER — 1928
267 2671 2671 ES24 ET30

STUDEBAKER — 1929
267 2671 2671 ES24 ET30

STUDEBAKER — 1929
284 2841 2841 ES24 ET30
284AX (Complete King Pin Assembly)

STUDEBAKER — 1930
284 2841 2841 ES24 ET30
284AX (Complete King Pin Assembly)

STUDEBAKER — 1929-30
284 2841 2841 ES5 ET9
284AX (Complete King Pin Assembly)
(Int. Rod Fact. Dup.)

MODELS 16, 16X, 1, 1¼ T—CYLS. 4—AXLE SALIS.

MODELS BUDDY, 1 T—CYLS. 6—AXLE OWN

MODELS 32X—CYLS. 6—AXLE OWN

MODELS 19X—CYLS. 6—AXLE OWN

MODELS LIGHT SIX—CYLS. 6—AXLE OWN

Front	2	0164	006	Front	2	0165	0029
Rear Up.	2	0164	006	Rear Up.	2	0166	009
Rear Lr.	2	0167	006	Rear Lr.	2	0166	006

MODELS SPECIAL SIX—CYLS. 6—AXLE OWN

Front	2	0160	006	Front	2	0161	0029
Rear	4	0160	006	Rear Up.	2	0162	009
				Rear Lr.	2	0162	006

MODELS SPECIAL SIX—CYLS. 6—AXLE OWN

Front	2	0160	006	Front	2	0161	0029
Rear	4	0163	006	Rear Up.	2	0162	009
				Rear Lr.	2	0162	006

MODELS SPECIAL, BIG SIX—CYLS. 6—AXLE OWN

Front	2	0160	006	Front	2	0161	0029
Rear	4	0163	006	Rear Up.	2	0162	009
				Rear Lr.	2	0162	006

MODELS SPECIAL SIX—CYLS. 6—AXLE OWN

MODELS STANDARD SIX—CYLS. 6—AXLE OWN

Front	2	0218	0029	Front	2	0219	0054
Rear	2	0218	0029	Rear	4	0218	0029

MODELS BIG SIX—CYLS. 6—AXLE OWN

Front	2	0218	0029	Front	2	0219	0054
Rear	2	0218	0029	Rear	4	0218	0029

MODELS DICTATOR SIX—CYLS. 6—AXLE OWN

Front	2	0218	0029	Front	2	0219	0054
Rear	2	0218	0029	Rear	4	0218	0029

MODELS DICTATOR SIX AFTER NO. 9056—CYLS. 6—AXLE OWN

Front	2	0218	0029	Front	2	0284	0054
Rear Up.	2	0218	0029	Rear	4	0218	0029
Rear Lr.	2	0283	0029				

MODELS DICTATOR SIX—CYLS. 6—AXLE OWN

Front	2	0314	0029	Front	2	0315	0080
Rear	4	0314	0029	Rear	4	0314	0029

MODELS DICTATOR SIX—CYLS. 6—AXLE OWN

Front	2	0314	0029	Front	2	0315	0080
Rear	4	0314	0029	Rear	4	0314	0029

MODELS PRESIDENT SIX—CYLS. 6—AXLE OWN

MODELS COMMANDER SIX—CYLS. 6—AXLE OWN

Front	2	0218	0029	Front	2	0284	0054
Rear Up.	2	0218	0029	Rear	4	0218	0029
Rear Lr.	2	0283	0029				

MODELS COMM. SIX TO SERIAL 4070501—CYLS. 6—AXLE OWN
(Int. Rod Fact. Dup.)

MODELS COMM. SIX AFTER SERIAL 4070502—CYLS. 6—AXLE OWN
(Int. Rod Fact. Dup.)

MODELS COMM. SIX GJ1 AND UP—CYLS. 6—AXLE OWN
(Int. Rod Fact. Dup.)

MODELS DICTATOR EIGHT—CYLS. 8—AXLE OWN

Front	2	0314	0029	Front	2	0315	0080
Rear	4	0314	0029	Rear	4	0314	0029

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.
STUDEBAKER 1929-30								**MODELS COMMANDER EIGHT—CYLS. 8—AXLE OWN**									
284	2841	2841				ES24	ET30	(Int. Rod Fact. Dup.)									
284AX (Complete King Pin Assembly)																	
STUDEBAKER 1928								**MODELS PRESIDENT EIGHT—CYLS. 8—AXLE OWN**									
267	2671	2671				ES24	ET31			Front	2	0218	0029	Front	2	0285	0079
						(Int. Rod Fact. Dup.)				Rear	4	0283	0029	Rear	4	0288	0078
STUDEBAKER 1929-30								**MODELS PRESIDENT EIGHT—CYLS. 8—AXLE OWN**									
267	2671	2671				ES24	ET31										
						(Int. Rod Fact. Dup.)											
STUDEBAKER 1931								**MODELS 54—CYLS. 6—AXLE OWN**									
284	2841	2841				ES5	ET9	*T706	*T723	Rear	2	0331	0068	Front	2	0332	0083
284AX (Complete King Pin Assembly)								SU808	SU807								
						(Int. Rod Fact. Dup.)											
STUDEBAKER 1930								**MODELS 53—CYLS. 6—AXLE OWN**									
284	2841	2841				ES5	ET9	*T705	*T708	Rear	2	0331	0068	Front	2	0332	0083
284AX (Complete King Pin Assembly)								SU808	SU807								
						(Int. Rod Fact. Dup.)											
STUDEBAKER 1931								**MODELS 70, 124" W. B.—CYLS. 8—AXLE OWN**									
284	2841	2841				ES24	ET30	(Int. Rod Fact. Dup.)									
284AX (Complete King Pin Assembly)																	
STUDEBAKER 1931								**MODELS 80, 90, PRESIDENT 8—CYLS. 8—AXLE OWN**									
267	2671	2671				ES24	ET31	(Int. Rod Fact. Dup.)									
STUDEBAKER 1931								**MODELS DICTATOR EIGHT—CYLS. 8—AXLE OWN**									
284	2841	2841				ES5	ET9	*T706	*T723	Rear	2	0331	0068	Front	2	0332	0083
284AX (Complete King Pin Assembly)								SU808	SU807								
						(Int. Rod Fact. Dup.)											
STUDEBAKER 1931								**MODELS 61 TO SERIAL 9022217—CYLS. 8—AXLE OWN**									
284	2841	2841				ES5	ET9			Front	2	0314	0029	Front	2	0315	0080
284AX (Complete King Pin Assembly)										Rear	4	0314	0029	Rear	4	0314	0029
						(Int. Rod Fact. Dup.)											
STUDEBAKER 1931								**MODELS 61 AFTER SERIAL 9022217—CYLS. 8—AXLE OWN**									
284	2841	2841				ES5	ET9	*T706	*T723	Rear	2	0331	0068	Front	2	0332	0083
284AX (Complete King Pin Assembly)								SU808	SU807								
						(Int. Rod Fact. Dup.)											
STUDEBAKER 1932								**MODELS 6-55—CYLS. 6—AXLE OWN**									
284	2841	2841				ES5	ET9	*T706	*T723								
284AX (Complete King Pin Assembly)								SU808	SU807								
						(Int. Rod Fact. Dup.)											
STUDEBAKER 1932								**MODELS 62 TO SERIAL NO. 9020477—CYLS. 8—AXLE OWN**									
284	2841	2841				ES5	ET9	*T706	*T723								
284AX (Complete King Pin Assembly)								SU808	SU807								
						(Int. Rod Fact. Dup.)											
STUDEBAKER 1932								**MODELS 71—TO SERIAL 8039177—CYLS. 8—AXLE OWN**									
284	2841	2841				ES24	ET30										
284AX (Complete King Pin Assembly)																	
						(Int. Rod Fact. Dup.)											
STUDEBAKER 1932								**MODELS 91—CYLS. 8—AXLE OWN**									
267	2671	2671				ES24	ET31	(Int. Rod Fact. Dup.)									
STUDEBAKER 1933								**MODELS 56—CYLS. 6—AXLE OWN**									
339	2841	2841				RS32	RT47	(Int. Rod Fact. Dup.)									
						ES24	ET49										
STUDEBAKER 1933								**MODEL 73—CYLS. 8—AXLE OWN**									
339	2841	2841				RS32	RT47	(Int. Rod Fact. Dup.)									
						ES24	ET49										
STUDEBAKER 1933								**MODEL 82—CYLS. 8—AXLE OWN**									
339	2841	2841				RS32	RT48	(Int. Rod Fact. Dup.)									
						ES24	ET49										
STUDEBAKER 1933								**MODEL 92—CYLS. 8—AXLE OWN**									
340	2671	2671				ES24	ET31										
						(Int. Rod Fact. Dup.)											
STUDEBAKER 1934								**MODEL DICTATOR, A—CYLS. 6—AXLE OWN**									
353R	3171	3171				RS25		*SU815	*SU810								
353L						(See Footnote)											

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

STUDEBAKER 1934
339 2841 2841 RS32 RT47 (Int. Rod Fact. Dup.)

STUDEBAKER 1934
339 2841 2841 RS32 RT47 (Int. Rod Fact. Dup.)

STUDEBAKER 1935

STUDEBAKER 1935
371 2841 2841

STUDEBAKER 1935

STUDEBAKER 1935

STUDEBAKER 1935
371 2841 2841

STUDEBAKER 1935-36
353R 3171 3171 RS25 (See Footnote)
353L

STUDEBAKER 1936
382R 3171 3171
382L

STUDEBAKER 1937
353R 3171 3171 RS25 (See Footnote)
353L

STUDEBAKER 1937
382R 3171 3171
382L

STUDEBAKER 1937
382R 3171 3171
382L

STUDEBAKER 1938
399R 3171 3171 RS25 (See Footnote)
399L

STUDEBAKER 1938
399R 3171 3171
399L

STUDEBAKER TRUCK 1929-30
323 3233 3234

STUDEBAKER TRUCK 1930-32
322 3221 3221 ES21 ET1

STUDEBAKER TRUCK 1935
414 4141 4141

STUDEBAKER TRUCK 1936
414 4141 4141

STUDEBAKER TRUCK 1936
322 3221 3221

MODELS COMM. B—CYLS. 8—AXLE OWN
*SU816 *SU819

MODEL PRES. C—CYLS. 8—AXLE OWN
*SU816 *SU819

MODELS 1A, 2A, 1B, 1C—CYLS. 6-8
Steering Knuckle Support T Arm 8 HB721

MODELS COMM. 1B, PRES. 1C—CYLS. 8—AXLE OWN
Front 6 HB681
Rear 6 HB681
F. of R. 4 HB690
R. of R. 4 HB689

MODELS 1C TO SERIAL 8107460—CYLS. 8
Front 4 HB681
Rear 8 HB681

MODELS 1C AFTER SERIAL 8107460—CYLS. 8
Front 4 HB690
Rear 4 HB689

MODELS 1A—CYLS. 6—INDEPENDENT WHEEL SUSPENSION
*SU810 (Rear of Rear)

MODELS DICTATOR 1A, 3A—CYLS. 6—AXLE OWN—CONVENTIONAL
*SU816 *SU810

MODELS 3A, 2C—CYLS. 6-8—AXLE OWN (PLANAR)
Front 4 HB740
Rear 4 HB740

MODELS DICTATOR, 5A—CYLS. 6—AXLE OWN CONVENTIONAL
*SU816 *SU835

MODELS DICTATOR, 6A—CYLS. 6—AXLE OWN PLANAR
*SU835 (Rear of Rear)

MODELS PRESIDENT, 3C—CYLS. 8—AXLE OWN PLANAR

MODELS 7A, 8A—CYLS. 6—AXLE OWN

MODELS PRESIDENT 4C—CYLS. 8—AXLE OWN

MODELS 75, 76, 77, 2½, 3½ T—CYLS. 6—AXLE OWN

MODELS S20, S30, 1½ T, S50, S60, S41, S51, S61, 2 T S120, S130, S140, S150, 3 T—CYLS. 6—AXLE OWN

MODELS ACE, IT2. 1½ T—CYLS. 6—AXLE CLARK

Front	2	0290	0029	Front	2	0382	00115
Rear	4	0380	0029	Rear Up.	2	0382	00114
				Rear Lr.	2	0382	00115

MODELS ACE, 2M2, 2T2, 1½ T—CYLS. 6—AXLE CLARK

Front	2	0380	0029	Front	2	0382	00115
Rear	4	0381	0029	Rear Up.	2	0382	00114
				Rear Lr.	2	0382	00115

MODELS BOSS, 2M6, 2W6, 2T—CYLS. 6—AXLE CLARK

Front	2	0380	0029	Front	2	0364	0094
Rear Up.	2	0381	0029	Rear	4	0364	0094
Rear Lr.	2	0380	0029				

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

STUDEBAKER TRUCK 1937-38
414 4141 4141

STUTZ 1927
234 2271 2271 Ball Type Used

STUTZ 1927-28
263 2631 2631 Ball Type Used

STUTZ 1936-38
415 4151 4151 ES62 RT45

TERRAPLANE 1933
342 3425 3421 RS25 RT45
342AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

TERRAPLANE 1934
342 3425 3421 ES37 RT45
342AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

TERRAPLANE 1935
342 3425 3421 ES46 ET58
342AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

TERRAPLANE 1935
342 3425 3421 ES55 RT45
342AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

TERRAPLANE 1935

TERRAPLANE 1936
342 3425 3421 ES46 ET58
342AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

TERRAPLANE 1937
390 3905 3901 ES46 ET58
390AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

TERRAPLANE 1937
390 3905 3901 ES46 ET58
390AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

TERRAPLANE 1938
395 3905 3901 ES72 RT45
395AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

TERRAPLANE 1938
395 3905 3901 ES72 RT45
395AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

TIMKEN AXLE 1922-25
250 1623 1624 541 5412 None

TIMKEN AXLE .....
155 1553 1554 501 5013 5014

TIMKEN AXLE 1918-23
109 1093 1094 529 5022 None

TIMKEN AXLE 1922-23
109 1093 1094 Ball Type Used

TIMKEN AXLE 1917-24
110 1103 1104 503 5013 5014

TIMKEN AXLE 1915-23
113 Brg. 1112 501 5013 5014

TIMKEN AXLE 1917-23
204 2043 2044 501 5013 5014

TIMKEN AXLE 1917-24
204 2043 2044 552 5523 5524

MODELS J15, J15M, K15, K15M, J15B, K15B—CYLS. 6—AXLE CLARK

MODELS A—CYLS. 8—AXLE TIMK.

MODELS AA, 145" W. B.—CYLS. 8—AXLE TIMK.

MODELS PACKAGE CAR, 90, 116—CYLS. 4
(Int. Rod Fact. Dup.)

MODELS K, KU, KT—CYLS. 6-8—AXLE OWN
*SU815 *SU810

MODELS K, KU, KS—CYLS. 6—AXLE OWN
*SU815 *SU811

MODELS SPECIAL—CYLS. 6—AXLE OWN
*SU815 *SU811

MODELS DE LUXE—CYLS. 6—AXLE OWN
*SU815 *SU811

MODELS SIX—CYLS. 6
Shock Absorber—Grommet 12 HB724

MODELS 61 DE LUXE, 62 CUSTOM—CYLS. 6—AXLE OWN
*SU815 *SU811
(*SU810 used on Front of Rear Spring)

MODELS 70, COMMERCIAL—CYLS. 6—AXLE OWN
*SU846 (Front of Front, Right Side)
*SU814 (Front of Front, Left Side)
*SU845 (Rear of Rear, Right Side)
*SU835 (Rear of Rear, Left Side)

MODELS 71, 72—CYLS. 6—AXLE OWN
*SU847 (Front of Front, Right Side)
*SU848 (Front of Front, Left Side)
*SU815 (Rear of Front, Right Side)
*SU849 (Rear of Front, Left Side)
*SU845 (Rear of Rear, Right Side)
*SU835 (Rear of Rear, Left Side)

MODELS 80, 88, BUSINESS CAR—CYLS. 6—AXLE OWN
*SU846 (Front of Front, Right Side)
*SU814 (Front of Front, Left Side)
*SU845 (Rear of Rear, Right Side)
*SU835 (Rear of Rear, Left Side)

MODELS 81 DE LUXE, 82 SUPER—CYLS. 6—AXLE OWN
*SU847 (Front of Front, Right Side)
*SU848 (Front of Front, Left Side)
*SU815 (Rear of Front, Right Side)
*SU849 (Rear of Front, Left Side)
*SU845 (Rear of Rear, Right Side)
*SU835 (Rear of Rear, Left Side)

MODELS 0100—AXLE OWN

MODELS 146, 147—AXLE OWN

MODELS 1150—AXLE OWN

MODELS 1160, 1161—AXLE OWN

MODELS 1216, 1250—AXLE OWN

MODELS 1320, 1322—AXLE OWN

MODELS 1450—AXLE OWN

MODELS 1452, 1460, 1468—AXLE OWN

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.
(6-1-38)

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.
TIMKEN AXLE — 1912-23										**MODELS 1516, 1517—AXLE OWN**							
204	2043	2044	503	5013	5014												
TIMKEN AXLE — 1912-24										**MODELS 1520-21-26-32-38—AXLE OWN**							
201	2013	2014	552	5523	5524												
TIMKEN AXLE — 1914-24										**MODELS 1542, 1544, 1548—AXLE OWN**							
200	None	2002	552	5523	5524												
TIMKEN AXLE — 1912-24										**MODELS 1630, 31, 32, 38—AXLE OWN**							
202	2022	2022	551	5513	5514												
TIMKEN AXLE — 1912-24										**MODELS 1730, 31, 32, 1830, 31—AXLE OWN**							
203	2032	2032	551	5513	5514												
TIMKEN AXLE — 1924										**MODELS 2011H, 2012H—AXLE OWN**							
195	1951	1951	Ball Type Used														
TIMKEN AXLE — 1928-32										**MODELS 12703, 12703H**							
328	3281	3281															
TIMKEN AXLE — 1930-35										**MODELS 30000, 30010, 30020, 31000, 31010, 31020, 31100-H—AXLE OWN**							
322	3221	3221															
TIMKEN AXLE — 1931-35										**MODELS 33000, 33010, 33020, H—AXLE OWN**							
403	4031	4031															
TIMKEN AXLE — 1931-35										**MODELS 35000, A, H; 35020, A, D, H, N—AXLE OWN**							
402	4021	4021															
TWIN CITY TRACTOR — 1928-36										**MODELS 17-28 AFTER NO. 24983; FT, FTA, 21-32—CYLS. 4—AXLE OWN**							
411	4111	4111															
TWIN CITY TRACTOR — 1930-36										**MODELS KOMBINATION KT, KTA, 1120—CYLS. 4—AXLE OWN**							
412	4121	4121															
TWIN COACH — 1929-31						ES18	ET23			**MODELS 40 PASS. BUS—AXLE TIMK.** (Int. Rod Fact. Dup.)							
TWIN COACH — 1929-31						ES18	ET24			**MODELS 24 PASS. BUS—AXLE TIMK.** (Int. Rod Fact. Dup.)							
TWIN COACH — 1930						ES19	ET25			**MODELS LIGHT DELIVERY—AXLE TIMK.** (Int. Rod Fact. Dup.)							
VIKING — 1929-30						ES1	ET13			**MODELS V29, V30—CYLS. 8—AXLE OWN**							
287	2351	2351								*T714 *T715							
WHITE TRUCK — 1918-28										**MODELS ¾, 1, 1½, 2 T—CYLS. 4—AXLE OWN**							
Special Type			556	5562	5565												
WHITE TRUCK — 1918-28										**MODELS 3½, 5 T—CYLS. 4—AXLE OWN**							
Special Type			557	5572	5575												
WHITE TRUCK — 1928-35										**MODELS 60, 60K, 61, 601, 602—CYLS. 6—AXLE OWN**							
417	4171	4173															
Sleeve 4174																	
WHITE TRUCK — 1930-36										**MODELS 611, 612, 612K, 620, 621, 712, 712A, 718, 718A, 613, 713 BUS—CYLS. 6—AXLE OWN**							
416	4161	4162															
Sleeve 4165																	
WHITE TRUCK — 1933-36										**MODELS 701, 701A, 702, 702A, 703, 704, 704A, 704K, 706 BUS, 707, 709, 709A—CYLS. 6—AXLE OWN**							
417	4172	4173															
Sleeve 4175																	
WHITE TRUCK — 1937-38						ES74				**MODELS 703, 704, 704A, 704H, 704K, 709, 709A—CYLS. 6—AXLE OWN** (Int. Rod Fact. Dup.)							
WILLS ST. CLAIRE — 1924-25										**MODELS B68—CYLS. 8—AXLE EATON**							
190	1414	1904	Ball Type Used														
WILLS ST. CLAIRE — 1925-26										**MODELS W6, T6—CYLS. 6—AXLE TIMK.**							
227	2271	2271	Ball Type Used														
WILLYS — 1930										**MODELS SIX, 98B—CYLS. 6—AXLE OWN**							
277	2201	2201	Ball Type Used							*T729 *T708	Front	2	08	007	Front	2	08	007
277A (Assembly-King Pins and Bushings)										SU805 SU807							

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

Wi-Ze

Chassis Parts

KING BOLTS AND BUSHINGS			TIE ROD BOLTS AND BUSHINGS			TIE RODS		SHACKLES		SPRING BOLTS AND BUSHINGS							
										FRONT SPRING				REAR SPRING			
Bolt	Upper Bush.	Lower Bush.	Bolt	Upper Bush.	Lower Bush.	Sockets	Inter. Rod	Front Spring	Rear Spring	Position	No. Used	Bolt	Bush.	Position	No. Used	Bolt	Bush.

WILLYS **1931-32**
248 2481 2481 Ball Type Used
2481SB 2481SB

WILLYS **1931**
300 3002 3002 Ball Type Used

WILLYS **1931-32**
315 3151 3151 Ball Type Used

WILLYS **1933-35**
338 3381 3381 RS25 ET60
338AX (Complete King Pin Assembly)

WILLYS **1936**
338 3381 3381 RS25 ET60
338AX (Complete King Pin Assembly)

WILLYS **1937-38**
394 3941 3941 ES69 ET70
394AX (Complete King Pin Assembly) (Int. Rod Fact. Dup.)

WILLYS TRUCK **1930-31**
300 3002 3002 ES7 ET9

WILLYS-KNIGHT **1920-28**
237 Brg. Used Ball Type Used

WILLYS-KNIGHT **1926-28**
238 Brg. Used Ball Type Used

WILLYS-KNIGHT **1928-30**
237 Brg. Used Ball Type Used

WILLYS-KNIGHT **1928-31**
300 3002 3002 Ball Type Used

WILLYS-KNIGHT **1929-30**
301 1471 1471 Ball Type Used
1471SB 1471SB

WILLYS-KNIGHT **1931-32**
315 3151 3151 Ball Type Used

WILLYS-KNIGHT **1932**
248 2481 2481 Ball Type Used
2481SB 2481SB

ZEPHYR **1936-37**
385 2863 2864 ES64 ET67 (Int. Rod Fact. Dup.)
2863SB 2864SB DS67
ES64L Adjustable Drag Link End.

MODELS 6-97, 98D, 6-90, C113—CYLS. 6—AXLE OWN
*T727 *T709
SU805 SU806

MODELS 8-80—CYLS. 8—AXLE OWN
*T706 *T709
SU808 SU806

MODELS 8-80D, 8-88—CYLS. 8—AXLE OWN
*T706 *T709
SU808 SU806

MODELS 77—CYLS. 4—AXLE OWN
*T734 *T734

MODELS 77—CYLS. 6
*SU810 *SU810

MODELS 37, 38—CYLS. 4—AXLE OWN
*SU810 (Rear of Front, Right Side)
*SU838 (Rear of Front, Left Side)
*SU838 (Rear of Rear, Right Side)
*SU810 (Rear of Rear, Left Side)

MODELS C101, C131, C157, 1½ T—CYLS. 6—AXLE OWN

MODELS 64, 70, 70A—CYLS. 4-6—AXLE OWN

MODELS 66, 66A—CYLS. 6—AXLE OWN

MODELS 56—CYLS. 6—AXLE OWN
*T729 *T708
SU805 SU807

MODELS 70B, 87—CYLS. 6—AXLE OWN
*T729 *T708
SU805 SU807

MODELS 66B—CYLS. 6—AXLE OWN

MODELS 66, 66D—CYLS. 6—AXLE OWN
*T706 *T709
SU808 SU806

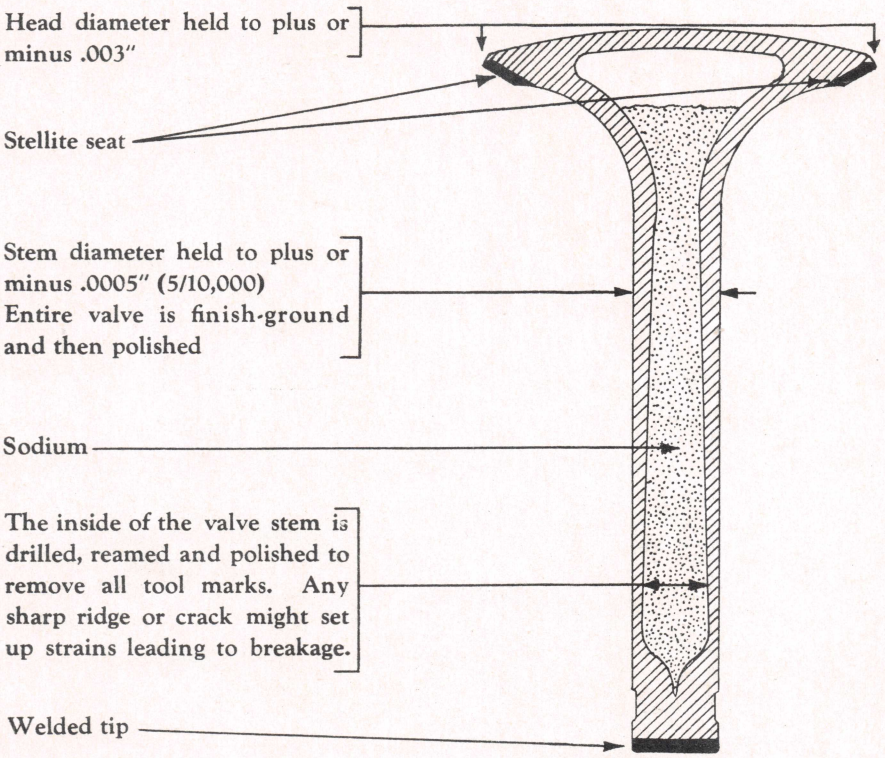
MODELS 95—CYLS. 6—AXLE OWN
*T727 *T709
SU808 SU806

MODELS ALL—CYLS. 12—AXLE OWN

Complete Drag Link Assembly.

Symbol "SB" indicates Split Bronze Bushing. Asterisk (*) preceding Shackle Stock number indicates type used for original equipment. When Intermediate Rod is not specified as Factory Duplicate, the old rod must be replaced when Thompson Sockets are used for replacement. Thompson Sockets will fit the original rod where no Intermediate Rod Number is shown.

Thompson Exhaust Valve for Wright "Cyclone" Engine



The hollow stem is 60% filled with chemically pure sodium for conducting heat from the head, down the stem and into the guides. Sodium has the consistency of butter when "cool" and becomes liquid at about 200° F., "splashing" the inside surface with the motion of the valve. This serves to dissipate the heat from the head of the valve.

•

Stellite is welded to the seat for greater resistance to heat, corrosion, pitting and wear. The welded tip also resists wear to a greater degree than the body steel of the valve. The stem is nitrided for longer wear in the guides.

Thompson ("AS") AEROTYPE Valves for heavy duty service in trucks, buses and tractors have the same STELLITE seats and stem tips and are made of the same austenetic Silcrome-X steel alloy as Thompson aircraft valves. See the Motor Parts Section of this catalog for Aerotype valve listings, designated by the letters "AS" before the stock number—also pages 28 and 29 for information on how to install, etc.

Go to Your Thompson Products Jobber!

USE HIS MACHINE SHOP SERVICE